

REPORT

EPA Region 5 Records Ctr.



237691

Former Hawthorne Mill Oxbow Sediment Investigation

**Kalamazoo River Study Group
Allied Paper, Inc./Portage Creek/
Kalamazoo River Superfund Site**

December 2004

BBL[®]
BLASLAND, BOUCK & LEE, INC.
engineers, scientists, economists

Table of Contents

Section 1. Background and Objectives	1-1
Section 2. Investigation and Activities	2-1
Section 3. Investigation Results	3-1
Section 4. Preliminary Findings	4-1
Section 5. References	1

Tables

- 1 Summary of Sediment and Soil Sample Data
- 2 Summary of Sediment and Bank Soil PCB Data

Figures

- 1 Former Hawthorne Mill Oxbow Sediment Transect Locations
- 2 Former Hawthorne Mill Oxbow – 2004 Sediment and Bank Soil Sampling Locations
- 3 PCB Concentrations by Distance

Appendices

- A Field Notes
- B Chain-of-Custody Forms
- C Laboratory Data Reports
- D Data QA/QC Review Reports

1. Background and Objectives

At the request of the United States Environmental Protection Agency (USEPA), Blasland, Bouck & Lee, Inc. (BBL) on behalf of Georgia-Pacific Corporation (Georgia-Pacific) collected sediment and bank soil samples from the oxbow in the Kalamazoo River adjacent to the Former Hawthorne Mill (Mill) in Kalamazoo, Michigan. Sampling was performed to assess the possible presence and distribution of polychlorinated biphenyl (PCB). Specific objectives of the sediment and bank soil sampling were to:

- Characterize the distribution of PCB in the oxbow sediment and bank soils.
- Determine if there are areas in the oxbow or specific sediment or bank soil characteristics that more favorably accumulate PCB, which in turn will focus future sampling or remedial efforts, if necessary.
- Assess the relationships between PCB concentration, sediment type, and total organic carbon (TOC) in the oxbow sediment and bank soils.

To accomplish these objectives, a stratified sampling approach was used, in which sediment cores were collected and categorized into strata including fine-grained sediment, coarse-grained sediment, and bank soils, from which representative subsamples were then randomly selected for laboratory analysis to characterize the PCB distribution in each strata. The sampling and analysis activities were performed with accordance to the letter Work Plan submitted to USEPA on July 21, 2004.

This memorandum describes the sampling activities and presents the results of the investigation.

2. Investigation and Activities

Sediment and bank soil sampling was conducted between August 16 and August 26, 2004, in an approximately 1,700-foot reach of the oxbow that is within the Mill property boundaries. Ten transects were established perpendicular to river flow within the oxbow. Approximate transect locations are presented on Figure 1. At each transect, five sediment cores were collected at equally-spaced intervals across the oxbow and one soil core was collected from the top of each bank, for a total of 70 cores. At each sediment core location, depth of water, depth of sediment, and thickness of sediment recovered was recorded. All sampling locations were surveyed using conventional survey methods. One additional sediment core was subsequently collected near the north bank at Transect 5 in response to the observation by field personnel of sediment which appeared as if it might contain of paper-making residual. A total of 71 soil and sediment cores were collected in the oxbow area.

Sediment and bank soil cores were collected using Lexan tubing driven until refusal; soil cores were also collected using Lexan tubing driven to a maximum depth of two feet. All cores were described, photographed, classified as either fine-grained, coarse-grained, or bank soil, and retained pending selection of cores to be processed. Processed cores were submitted to the STL Laboratory in Burlington, Vermont for PCB analysis. All core sampling and handling was performed in accordance with the Allied Paper, Inc/Portage Creek/Kalamazoo River Superfund Site Remedial Investigation/Feasibility Study Work Plan (1993a), Field Sampling Plan (FSP; 1993b), Quality Assurance Project Plan (QAPP; 1993c), and Health and Safety Plan (HASP; 1993d).

Based on the physical descriptions of the cores, each core was classified as being fine-grained sediment, coarse-grained sediment, or bank soil. Within these strata, there were 17 fine-grained sediment cores, 34 coarse-grained sediment cores, and 20 bank soil cores. Based on the relative proportions of the three strata, 25 cores were allocated for laboratory analysis:

- 8 randomly selected fine-grained sediment cores,
- 10 randomly selected coarse-grained sediment cores,
- 6 randomly selected bank soil cores; and,
- a single additional core intentionally collected to represent a deposit of gray silt.

The list of cores proposed for analysis was presented to the USEPA on August 25, 2004, and approved by USEPA the same day. Following USEPA approval, cores selected for analysis were sectioned into the zero- to

six-inch depth increment, six- to 12-inch depth increment, and into one-foot increments thereafter. However, if distinguishable layers were visible in the core, samples were instead split at the boundary of the layer, or into one-foot increments, whichever was smaller. All samples were submitted to STL Laboratories in Burlington, Vermont for total PCB (quantified as Aroclors) and TOC analyses. PCB Aroclors were analyzed using USEPA method 8081 and STL's method for quantitating individual Aroclors using iterative multiple regressions of chromatogram peak size for various Aroclor combinations against sample peaks. All sample handling, analyses, and subsequent data validation was performed consistent with the Kalamazoo River RI/FS FSP and QAPP (1993b, 1993c, respectively).

3. Investigation Results

The data collected during core collection are presented in Table 1, including water depth, sediment thickness, and physical descriptions of the cores. In general, the cores from the center of the channel tended to be coarser than the cores from the sides of the channels. There was flowing water at the time of sampling; the oxbow was not stagnant or disconnected from the main channel. Water was typically less than one foot deep, averaging 0.52 feet for all sediment core locations. The thickness of sediment ranged from 0.3 feet to 4.4 feet, with an overall average of 1.6 feet.

In one core from the north side of Transect 5 (location OPT5-6, Figure 2), dark sediment was present underneath approximately 0.5 feet of sand, and field personnel noted that it may contain paper-making residuals. That core was selected for analysis. There was also one area in the oxbow where fine, soft sediment was observed during coring activities. At the request of Georgia-Pacific that sediment was sampled (location OPT-5A-6).

Based on the physical descriptions of the sediment cores, 16 sediment cores were classified as fine-grained sediment and 34 cores were classified as coarse-grained sediment. Table 1 includes the classification of each core (note that as stated in Section 2, the 17th sediment core, classified as fine-grained, was collected at Georgia-Pacific's request from the soft, firm sediment deposit observed near the north bank at Transect 5). Fine-grain sediment typically occurred closer to the bank in the downstream end of the oxbow. Only two locations were classified as fine-grain sediment upstream of Transect 5. Other than the geographic variation, there was relatively little distinction between the fine- and coarse-grained sediment beds. The fine-grain sediment cores were slightly thicker than the coarse-grain sediment cores, with an average thickness of 1.4 feet compared to 1.3 feet, respectively. The fine-grain sediment also contained a lower solids content overall (53 percent solids, compared to 65 percent solids in coarse-grain sediment samples); however, when solely considering surface samples, fine-grain sediment contained 57 percent solids compared to 56 percent solids in coarse-grain sediment. Table 2 presents the percent solids data for each sample.

Of the 50 sediment cores, 8 of the 16 fine-grain cores and 10 of the 34 coarse-grain cores were randomly selected for PCB and TOC analyses. Six of the 20 bank soil cores were also submitted for laboratory analysis. Figure 2 shows all sampling locations with the fine-grain and coarse-grain sediment cores indicated along with the locations from which samples were submitted to the laboratory.

PCB concentrations in the oxbow samples, when detected at all, were low. Of 65 samples (with duplicate samples averaged), PCB were not detected in 30 samples (45 percent), was less than 0.10 milligram per kilogram (mg/kg) in 41 samples (62 percent), and less than 1.0 mg/kg in 59 samples (90 percent). Of the six PCB concentrations greater than 1.0 mg/kg, the three highest occurred in samples from locations OPT5-6 and OPT5A-6 at depths greater than 6 inches (surface sediment PCB concentrations were not detected at both locations). Overall, the average PCB concentration, assuming zero for non-detections, was 0.26 mg/kg, while the median was 0.037 mg/kg. The range was from non-detect to 3.4J mg/kg.

TOC content in the sediment and bank soil samples ranged from 0.15 percent in a sample from location OPT6-6 (12-18 inch depth interval) to 24 percent in the surface sample (0-6 inch deep) from location OPT7-6. The average TOC content for all samples was 6.5 percent, compared to 7.5 percent in the 0- to 6-inch interval only. The median TOC for all samples was 3.5 percent.

Aroclors 1254 and 1260 comprised approximately 91% of the total PCB mass quantitated. Aroclor 1242, which is associated with paper-making residuals, was detected in only 10 samples from six locations. The average percent of PCB quantitated as Aroclor 1254 and Aroclor 1260 in samples where PCB were detected was 67 percent and 19 percent, respectively. The two samples with the highest PCB concentrations were quantitated entirely as Aroclor 1254 (approximately 90%) and 1260 (approximately 10%).

4. Preliminary Findings

PCB distribution in the oxbow sediment is consistent with the distribution of PCB in the coarse sediment between Morrow Dam and Portage Creek collected in 1993 and 2000, and the sediment PCB data from Morrow Lake in 2000, as presented in the Supplement to the Kalamazoo River RI/FS - Phase I report (BBL, 2000). Even in the dark silt sediment deposit that was observed in the oxbow and sampled under the premise that it may contain paper-making residuals, the maximum total PCB concentration was 3.4 mg/kg.

Although there are slight differences in the PCB concentrations among the three sediment and soil strata, the means are not significantly different using normal or log-normal statistics. The low proportion and concentrations of PCB detections limit the applicability of standard statistics. PCB data for samples from the three strata are summarized below, along with the average TOC concentrations and percent solids:

	Sediment		Bank
	Coarse	Fine	Soil
Number of samples	22	27	16
PCB range (mg/kg)	ND-1.0	ND-3.4	ND-1.4
Arithmetic average PCB (mg/kg)	0.17	0.39	0.18
Median PCB (mg/kg)	ND	0.10	0.02
Average TOC (mg/kg)	54,000	78,000	61,000
Average Percent Solids	65	53	70

Note: ND indicates PCB were not detected.

There do not appear to be any large areas or sediment characteristics that are indicative of PCB accumulation or storage in the sediment or bank soil. PCB concentrations in all samples are shown in Figure 3 as a function of longitudinal distance upstream and lateral distance within the oxbow. No clear patterns are evident; PCB concentrations are generally low over the distance of the channel. TOC and percent solids data are also generally related to sediment and soil strata, but not significantly; the most significant variations in TOC are more likely explained by the physical locations of the samples within the oxbow. For example, the highest TOC (24 percent at location OPT7-6) was observed in the surface sample collected very near the rivers edge, and while the sediment material was coarse, the sample contained organic and vegetative material most likely related to the littoral environment.

Also, due to the high number of samples with very low or non-detectable PCB concentrations, no strong predictive relationships between PCB concentration, TOC, and percent solids could be derived. However, in

general, the highest PCB concentrations (greater than 0.20 mg/kg) corresponded to TOC content of approximately 4.5 percent or more; in samples with TOC less than 4.5 percent, PCB concentrations were always less than 0.20 mg/kg or not detected. Not all samples with TOC greater than 4.5 percent contained higher PCB concentrations, however, 31 of the 37 samples were less than 1.0 mg/kg and 13 of the 31 samples were non-detections. Similarly, all the samples with PCB concentrations greater than 0.2 mg/kg comprised less than 60 percent solids, and samples with greater than 60 percent solids all had PCB concentrations less than 0.20 mg/kg, if PCB were detected. In samples that were less than 60 percent solids or greater than 4.5 percent TOC, no relationships with PCB concentration was observed. Samples with those characteristics were found in all three strata, although most were classified as fine-grained sediment.

5. References

- Blasland, Bouck & Lee, Inc. (BBL). *Allied Paper Inc./Portage Creek/Kalamazoo River Superfund Site Remedial Investigation /Feasibility Study Work Plan*, (Syracuse, NY: July 1993a).
- Blasland & Bouck Engineers, P.C., *Allied Paper Inc./Portage Creek/Kalamazoo River Superfund Site Remedial Investigation /Feasibility Study, Field Sampling Plan*, (Syracuse, NY: July 1993b).
- Blasland & Bouck Engineers, P.C., *Allied Paper Inc./Portage Creek/Kalamazoo River Superfund Site Remedial Investigation /Feasibility Study, Quality Assurance Project Plan*, (Syracuse, NY: July 1993c).
- Blasland & Bouck Engineers, P.C., *Allied Paper Inc./Portage Creek/Kalamazoo River Superfund Site Remedial Investigation /Feasibility Study, Health and Safety Plan*, (Syracuse, NY: July 1993d).
- BBL. *Allied Paper Inc./Portage Creek/Kalamazoo River Superfund Site RI/FS, Supplement to the Kalamazoo River RI/FS – Phase I*, (Syracuse, NY: October 2000).

Tables

Table 1
Summary of Sediment and Soil Sample Data
Former Hawthorne Mill Oxbow

Location	Date	Time	Water Depth (ft)	Probe Depth (ft)	Penetration (ft)	Recovery (ft)	Top (in)	Bottom (in)	Class	Description
OPT1-1	8/20/2004	1438				2	0 6 12	6 12 24		Fine dark brown silt with organic matter Fine dark brown silt with organic matter Fine dark brown silt with fine sand
OPT1-2	8/17/2004	1520	0	3.4	3.3	2.8	0 9 21	9 21 34	Coarse	Dark brown silt Brown fine sand with silt Brown fine to medium sand over fine to coarse sand and gravel
OPT1-3	8/17/2004	1510	0	3.7	3.4	2.7	0 7 23	7 23 32	Fine	Dark brown fine sand and silt Dark gray silt Gray medium sand to very coarse sand and gravel
OPT1-4	8/17/2004	1450	0.7	2.8	2.2	2	0 11	11 23	Coarse	Dark brown fine sand and silt Dark brown silt, coarse sand and gravel at the bottom
OPT1-5	8/17/2004	1435	2.6	1.3	1.2	1	0 4	4 12	Fine	Dark brown fine sand, trace silt Dark brown silt
OPT1-6	8/17/2004	1420	1.6	2	1.9	1.7	0 2	2 20	Fine	Brown fine sand, trace medium to coarse sand Dark brown silt, some fine sand
OPT1-7	8/20/2004	845				1	0 6	6 12		Dark brown silty clay, some roots Dark brown silty clay, some roots Rocks prevent sampling deeper than one foot
OPT2-1	8/20/2004	1421				2	0 6 12	6 12 24		Dark brown silts with dark brown clay Tan sand mixed with coarse grains and dark clay Fine sand mixed with some dark clay with medium saturation
OPT2-2	8/17/2004	1540	0	0.3	0.3	0.2	0	3	Fine	Dark brown silt over medium to very coarse sand and gravel
OPT2-3	8/17/2004	1550	0.2	0.5	0.5	0.5	0 1	1 6	Coarse	Brown fine sand, trace medium to coarse sand Dark brown fine to medium sand over coarse sand and gravel
OPT2-4	8/17/2004	1605	0.8	4.4	4.4	3.8	0 4 22	4 22 44	Coarse	Dark brown fine sand Dark brown silt, some fine sand Medium sand to very coarse sand, fine gravel
OPT2-5	8/17/2004	1620	1.3	4.5	4.3	3.1	0 8 33	8 33 38	Fine	Brown fine sand, trace medium to coarse sand, gravel Dark brown silt, some fine sand Dark brown medium sand to very coarse sand, gravel
OPT2-6	8/17/2004	1630	0.4	1.8	1.6	1.3	0 3	3 15	Coarse	Brown fine sand with medium to coarse sand Dark brown/gray fine to coarse sand, fine gravel
OPT2-7	8/20/2004	903				0.5	0	6		Dark brown silt some sand with rocks Resistance at 6 inches from roots. Attempted two locations
OPT3-1	8/20/2004	1409				2	0 6 12	6 12 24		Dark brown fine silts with organic matter Dark brown fine silts with some dark clay Tan sand with coarse grains
OPT3-2	8/17/2004	1635	0	0.6	0.5	0.5	0	6	Fine	Dark brown silt with fine sand over coarse sand and gravel at the bottom
OPT3-3	8/17/2004	1645	0	1	0.7	0.6	0	7	Coarse	Dark brown fine sand with silt over coarse sand, gravel at the bottom
OPT3-4	8/17/2004	1655	1.1	1.5	1.3	1.1	0 4	4 13	Coarse	Brown fine sand, trace medium sand Black fine sand with medium to coarse sand, gravel at bottom
OPT3-5	8/17/2004	1700	1.5	3	3	2.7	0 10 27	10 27 29	Fine	Brown fine to medium sand, trace coarse sand, fine gravel Dark gray/black silt, trace fine sand Dark gray silt with fine to coarse sand, gravel

Table 1
Summary of Sediment and Soil Sample Data
Former Hawthorne Mill Oxbow

Location	Date	Time	Water Depth (ft)	Probe Depth (ft)	Penetration (N)	Recovery (N)	Top (in)	Bottom (in)	Class	Description
OPT3-6	8/17/2004	1715	0.2	0.6	1.2	1.1	0 3 12	3 12 13	Fine	Brown fine sand, some silt, trace medium sand Gray silt Gray fine to medium sand, trace coarse sand and gravel
OPT3-7	8/20/2004	923				2	0 6 12	6 12 24		Dark brown silt, some coarse grain, some rocks. Dark and light brown silt with sand and rocks Mix of brown fine silt with some grains, organic material, rocks, and silty clay
OPT4-1	8/20/2004	1345				2	0 6 12	6 12 24		Fine silt material with organic matter Fine silt mixed with a dark clay Tan sand mixed with coarse grain and clay
OPT4-2	8/17/2004	1730	0	1.3	1.2	1	0	12	Fine	Dark brown silt, trace fine sand
OPT4-3	8/17/2004	1745	0	1.2	1.1	1.1	0	11	Fine	Dark brown silt, trace fine sand
OPT4-4	8/17/2004	1755	0.8	0.5	1.8	1.2	0 3 8	3 8 14	Coarse	Brown fine sand, trace fine silt Dark brown silt and fine to coarse sand Gray fine to coarse sand and fine gravel
OPT4-5	8/17/2004	1810	0.9	1.7	1.8	1.5	0 2 10	2 10 18	Coarse	Sand Dark grey to black silts, some fine to medium sands Fine and medium sand, coarse sand and gravel
OPT4-6	8/17/2004	1820	0	0.7	0.7	0.6	0 2 3	2 3 7	Fine	Dark brown silt White/gray calcite material Brown silt, fine to coarse sand, fine gravel
OPT4-7	8/20/2004	943				2	0 6 12	6 12 24		Dark brown fine silt. Some grain, some rock, some organic matter. Dark brown fine silt. Few grains, some rock. Dark brown fine silt. Few grains, some rock.
OPT5-1	8/20/2004	1325				1	0 6	6 12		Fine brown silt with organic matter Fine brown silt with light clay Roots or rock at one foot
OPT5-2	8/18/2004	750	0	1.2	1.1	1	0 3 6	3 6 12	Fine	Dark brown silt, trace fine sand Dark brown silt Silt with medium to very coarse sand and fine gravel
OPT5-3	8/18/2004	805	0	0.9	0.8	0.7	0 2	2 7	Fine	Brown fine sand with some silt Dark gray/brown silt
OPT5-4	8/18/2004	810	0.5	0.4	0.6	0.5	0 2	2 7	Coarse	Brown fine sand, trace organics Dark brown medium to very coarse sand, fine gravel
OPT5-5	8/18/2004	815	0.6	1.5	1.4	1.3	0 4 8	4 8 15	Coarse	Brown fine and medium sand Dark gray to black fine to medium sand, coarse and Dark gray to black medium to very coarse sand and gravel
OPT5-6	8/18/2004	820	0	2.8	2.4	1.9	0 5 19	5 19 22	Fine	Brown fine to medium sand, trace coarse sand and silt Dark gray silt with fine sand, trace medium to coarse sand Dark gray fine to coarse sand, some fine gravel
OPT5-7	8/20/2004	1002				0.5	0	0		Dark brown fine silt with much grains and rock, some organic matter Rocks prevent sampling deeper than six inches
OPT6-1	8/20/2004	1310				2	0 6 12	6 12 24		Fine brown silt with some organic matter Fine brown silt mixed with sand and medium coars grains Tan sand mixed with very coarse grains

Table 1
Summary of Sediment and Soil Sample Data
Former Hawthorne Mill Oxbow

Location	Date	Time	Water Depth (ft)	Probe Depth (ft)	Penetration (ft)	Recovery (ft)	Top (in)	Bottom (in)	Class	Description
OPT6-2	8/18/2004	830	0	0.9	0.7	0.6	0 1	1 8	Coarse	Dark brown silt, some fine sands, some fine gravel Gray medium to very coarse sand with fine gravel
OPT6-3	8/18/2004	840	0.9	1	0.8	0.6	0	7	Coarse	Brown to dark brown fine sand, trace silt over coarse sand and gravel
OPT6-4	8/18/2004	845	0.8	0.4	1	0.9	0 1	1 10	Coarse	Brown fine sand, trace silt Gray medium to very coarse sand, fine gravel
OPT6-5	8/18/2004	850	0.8	0.7	1.9	1.5	0 2	2 18	Coarse	Brown fine sand, trace medium sand Gray medium to very coarse sand and gravel
OPT6-6	8/18/2004	900	0	2.3	2	1.8	0 4 8 16	4 8 16 22	Coarse	Dark brown silt Dark brown fine to medium sand, trace coarse sand and organics Dark brown silt, trace fine sand Tan medium to very coarse sand and gravel
OPT6-7	8/20/2004	1012				2	0 6 12	6 12 24		Black/dark brown fine silt, few grain, some rock Dark brown fine silt, some grain, some rock, some organic matter Mix of dark brown fine silt, some grain and brown sand, some organic material, some rocks. Some silty brown clay at 24 inches
OPT7-1	8/20/2004	1245				2	0 6 12	6 12 24		Fine brown silt and organic matter Fine brown silt, some clay, organic matter Light brown clay-like material, some fine silts and organic matter
OPT7-2	8/18/2004	920	0	0.9	0.8	0.6	0	6	Coarse	Brown fine sand over medium to very coarse sand
OPT7-3	8/18/2004	935	0.6	0.8	0.6	0.5	0	7	Coarse	Brown fine to very coarse sand and gravel
OPT7-4	8/18/2004	940	0	1.2	1.5	1.1	0 2	2 14	Coarse	Dark brown silt to fine and medium fine sand Dark brown to gray fine to very coarse sand and fine gravel
OPT7-5	8/18/2004	950	0	2.5	2.3	2	0 11	11 24	Coarse	Dark brown silt, some fine sand Gray fine sand with medium coarse sand and fine gravel
OPT7-6	8/18/2004	1000	0	2.3	1.5	1	0 8	8 12	Coarse	Dark brown silt, some fine sand Tan fine to very coarse sand and gravel
OPT7-7	8/20/2004	1038				2	0 6 12	6 12 24		Very coarse grains, black, some rock, some organics Little silt Very coarse grains, black, some rock, some organics Little silt Very coarse grains, black, some rock, some organics Little silt
OPT8-1	8/20/2004	1232				1	0 6	6 12		Fine brown silt, some organics Fine brown silt, some organics Roots or rock at one foot.
OPT8-2	8/18/2004	1010	0	3	2.3	1.7	0 6 11	6 11 20	Coarse	Dark brown fine to coarse sand Fine sand and silt Dark brown very coarse sand and gravel
OPT8-3	8/18/2004	1020	1.1	0.7	1.5	1.2	0 3	3 14	Coarse	Dark brown very fine sand and silt Dark brown fine and coarse sand, silt and gravel
OPT8-4	8/18/2004	1020	0.1	0.7	0.8	0.7	0	10	Coarse	Dark gray very coarse rocks and gravel
OPT8-5	8/18/2004	1030	0	3	2	1.6	0 8 14	8 14 19	Coarse	Light gray sand and silts Light gray coarse to very coarse gravel Light gray sand and silt
OPT8-6	8/18/2004	1040	0	2.9	2.2	1.5	0 2 3	2 3 17	Fine	Black sand and silt White organics with fine sand Dark brown sand and silt

Table 1
Summary of Sediment and Soil Sample Data
Former Hawthorne Mill Oxbow

Location	Date	Time	Water Depth (ft)	Probe Depth (ft)	Penetration (ft)	Recovery (ft)	Top (in)	Bottom (in)	Class	Description
OPT8-7	8/20/2004	1055				1	0 6	6 12		Mix of dark brown fine silt and brown sand. Some rocks and pieces of brick Mix of dark brown fine silt and brown sand. Some rocks and pieces of brick Rocks and bricks prevented sampling deeper than one foot
OPT9-1	8/20/2004	1214				24	0 12 20	12 20 24		Fine brown silt with organic matter Brown medium sand Dark brown fine silt
OPT9-2	8/18/2004	1345	1	2.4	2.2	1.9	0 2 19	2 19 22	Fine	Light gray fine sand and silt Dark brown fine sand and silt Light gray fine sand and silt
OPT9-3	8/18/2004	1350	1	1.5	1.5	1.3	0 1 7	1 7 15	Coarse	Light gray fine sand and silt Light gray fine to coarse gravel Dark brown fine sand and silt
OPT9-4	8/18/2004	1400	0	1.8	1.8	1.7	0 5 15	5 15 21	Coarse	Brown sand and silt Brown fine to coarse gravel, fine sand and silt Dark brown sand and silt
OPT9-5	8/18/2004	1405	0.6	0.6	0.5	0.5	0	6	Coarse	Sand over gravel
OPT9-6	8/18/2004	1410	0.3	0.7	0.6	0.6	0 3	3 7	Coarse	Gray coarse gravel and fine sands Dark gray sand and silt
OPT9-7	8/20/2004	1107				1.5	0 6 12	6 12 18		Silty grey clay, some organics Gray silt, sturated, much coarse grain Saturated gray silt, much coarse grain. Rock at 18 inches.
OPT10-1	8/20/2004	1150				1.5	0 6 14	6 14 18		Dark brown silty clay, fine grains, some organics Dark brown silty clay, fine grains, some organics Black silty clay, saturated. Roots at 18 inches.
OPT10-2	8/18/2004	1430	0.3	4	3.8	3.5	0 17 24	17 24 41	Coarse	Dark brown sand and silt Dark brown sand to medium coarse gravel Dark brown sand and silt
OPT10-3	8/18/2004	1435	1.1	2	1.7	1.5	0 5 11	5 11 18	Coarse	Dark brown sand and silt Black sand and silt Light brown medium to coarse gravel
OPT10-4	8/18/2004	1445	2.1	1.5	1	0.8	0	8	Coarse	Fine sand and silt with coarse gravel
OPT10-5	8/18/2004	1450	2.1	1.2	1.1	1	0 7	7 12	Coarse	Brown sand and silts with medium to coarse gavel Light gray sands and silts
OPT10-6	8/18/2004	1505	0	1.4	1.4	1.3	0 8	8 16	Coarse	Dark brown silts and sand White calcite with fine sand
OPT10-7	8/20/2004	1126				2	0 6 14	6 14 24		Dark brown silty clay, some organics. Dark brown silty clay, some rocks Tan, large grain, sand, some rock

Table 2
Summary of Sediment and Bank Soil PCB Data
Former Hawthorne Mill Oxbow Area

Location ID	Sample Type	Date Collected	Sample ID	Dup ID	Depth Interval (in.)	Percent Solids	PCB Concentration (mg/kg)							Total PCB	TOC (%)
							Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260		
OPT1-5	Fine	8/17/2004	K25749		0-6	48	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	0.083 J	0.12	0.13	0.33 J	6.5 J
OPT1-5	Fine	8/17/2004	K25755		12-14	70	ND(0.071)	ND(0.071)	ND(0.071)	ND(0.071)	ND(0.071)	ND(0.071)	ND(0.071)	ND(0.071)	4.1 J
OPT1-5	Fine	8/17/2004	K25756		6-12	34	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	11.3 J
OPT1-6	Fine	8/17/2004	K25752		0-6	48	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	0.47	ND(0.10)	0.47	4.8 J
OPT1-6	Fine	8/17/2004	K25762		12-18	35	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	12.5 J
OPT1-6	Fine	8/17/2004	K25761		6-12	34	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	10.9 J
OPT2-1	Bank Soil	8/20/2004	K25710		0-6	42	ND(0.12)	ND(0.12)	ND(0.12)	ND(0.12)	ND(0.12)	0.84	0.21	1.1	8.9
OPT2-1	Bank Soil	8/20/2004	K25712		12-24	81	ND(0.062)	ND(0.062)	ND(0.062)	ND(0.062)	ND(0.062)	ND(0.062)	0.037 J	0.037 J	1.7
OPT2-1	Bank Soil	8/20/2004	K25711		6-12	66	ND(0.076)	ND(0.076)	ND(0.076)	ND(0.076)	ND(0.076)	0.047 J	0.1	0.15 J	1.5
OPT2-2	Fine	8/17/2004	K25721		0-3	56	ND(0.089)	ND(0.089)	ND(0.089)	ND(0.089)	ND(0.089)	0.13	ND(0.089)	0.13	4.0
OPT2-3	Coarse	8/17/2004	K25751		0-6	63	ND(0.081)	ND(0.081)	ND(0.081)	ND(0.081)	ND(0.081)	0.15	ND(0.081)	0.15	4.5 J
OPT2-4	Coarse	8/17/2004	K25745		0-6	57	ND(0.089)	ND(0.089)	ND(0.089)	0.18	ND(0.089)	0.36	0.050 J	0.59 J	5.0
OPT2-4	Coarse	8/17/2004	K25743		12-24	41	ND(0.12)	ND(0.12)	ND(0.12)	ND(0.12)	ND(0.12)	ND(0.12)	ND(0.12)	ND(0.12)	9.0
OPT2-4	Coarse	8/17/2004	K25747	K25748	24-36	85	ND(0.059)	ND(0.059)	ND(0.059)	ND(0.059)	ND(0.059)	ND(0.059)	ND(0.059)	ND(0.059)	0.55 J
OPT2-4	Coarse	8/17/2004	K25748	K25747	24-36	83	ND(0.060)	ND(0.060)	ND(0.060)	ND(0.060)	ND(0.060)	ND(0.060)	ND(0.060)	ND(0.060)	2.4 J
OPT2-4	Coarse	8/17/2004	K25746		36-44	87	ND(0.058)	ND(0.058)	ND(0.058)	ND(0.058)	ND(0.058)	ND(0.058)	ND(0.058)	ND(0.058)	1.9 J
OPT2-4	Coarse	8/17/2004	K25744		6-12	44	ND(0.11)	ND(0.11)	ND(0.11)	0.11 J	ND(0.11)	0.56	0.24	0.91 J	6.2
OPT2-5	Fine	8/17/2004	K25763		0-6	42	ND(0.12)	ND(0.12)	ND(0.12)	0.19	ND(0.12)	0.30	0.065 J	0.56 J	19 J
OPT2-5	Fine	8/17/2004	K25760		12-24	39	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	0.096 J	ND(0.13)	0.096 J	8.1 J
OPT2-5	Fine	8/17/2004	K25765		24-32	45	ND(0.11)	ND(0.11)	ND(0.11)	ND(0.11)	ND(0.11)	ND(0.11)	ND(0.11)	ND(0.11)	8.2 J
OPT2-5	Fine	8/17/2004	K25764		32-40	93	ND(0.054)	ND(0.054)	ND(0.054)	ND(0.054)	ND(0.054)	ND(0.054)	ND(0.054)	ND(0.054)	2.1 J
OPT2-5	Fine	8/17/2004	K25766	K25767	6-12	33	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	0.41	0.096 J	0.51 J	13.9 J
OPT2-5	Fine	8/17/2004	K25767	K25766	6-12	37	ND(0.13)	ND(0.13)	ND(0.13)	0.085 J	ND(0.13)	0.41	0.089 J	0.58 J	8.9 J
OPT3-3	Coarse	8/17/2004	K25757		0-6	38	ND(0.13)	ND(0.13)	ND(0.13)	0.084 J	ND(0.13)	0.16	ND(0.13)	0.24 J	9.4 J
OPT3-5	Fine	8/17/2004	K25741	K25742	0-6	68	ND(0.073)	ND(0.073)	ND(0.073)	ND(0.073)	ND(0.073)	0.13	ND(0.073)	0.13	0.97
OPT3-5	Fine	8/17/2004	K25742	K25741	0-6	72	ND(0.069)	ND(0.069)	ND(0.069)	0.039 J	ND(0.069)	0.11	ND(0.069)	0.15 J	1.0
OPT3-5	Fine	8/17/2004	K25739		12-24	50	ND(0.10)	ND(0.10)	ND(0.10)	0.13	ND(0.10)	0.37	ND(0.10)	0.50	9.3
OPT3-5	Fine	8/17/2004	K25738		24-29	42	ND(0.12)	ND(0.12)	ND(0.12)	ND(0.12)	0.24	ND(0.12)	ND(0.12)	0.24	10.9
OPT3-5	Fine	8/17/2004	K25734		6-12	56	ND(0.089)	ND(0.089)	ND(0.089)	0.048 J	0.14	0.34	ND(0.089)	0.53 J	12.7
OPT4-3	Fine	8/17/2004	K25750		0-6	40	ND(0.13)	ND(0.13)	ND(0.13)	0.068 J	ND(0.13)	0.18	0.084 J	0.33 J	11.4 J
OPT4-3	Fine	8/17/2004	K25758	K25759	6-12	39	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	0.084 J	0.084 J	10 J
OPT4-3	Fine	8/17/2004	K25759	K25758	6-12	37	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	10.2 J
OPT4-5	Coarse	8/17/2004	K25736		0-4	71	ND(0.071)	ND(0.071)	ND(0.071)	ND(0.071)	0.036 J	ND(0.071)	ND(0.071)	0.036 J	3.7
OPT4-5	Coarse	8/17/2004	K25740		12-18	78	ND(0.064)	ND(0.064)	ND(0.064)	ND(0.064)	ND(0.064)	ND(0.064)	ND(0.064)	ND(0.064)	0.54
OPT4-5	Coarse	8/17/2004	K25735		4-12	79	ND(0.063)	ND(0.063)	ND(0.063)	ND(0.063)	ND(0.063)	ND(0.063)	ND(0.063)	ND(0.063)	3.3
OPT5-3	Fine	8/18/2004	K25725		0-6	37	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	9.6
OPT5-3	Fine	8/18/2004	K25733		6-12	85	ND(0.059)	ND(0.059)	ND(0.059)	ND(0.059)	ND(0.059)	0.037 J	ND(0.059)	0.037 J	1.8
OPT5-6	Fine	8/18/2004	K25719		0-6	88	ND(0.057)	ND(0.057)	ND(0.057)	ND(0.057)	ND(0.057)	ND(0.057)	ND(0.057)	ND(0.057)	1.4
OPT5-6	Fine	8/18/2004	K25718		12-20	45	ND(0.22)	ND(0.22)	ND(0.22)	0.13 J	ND(0.22)	1.1 J	0.17 J	1.4 J	5.1
OPT5-6	Fine	8/18/2004	K25720		20-23	52	ND(0.096)	ND(0.096)	ND(0.096)	ND(0.096)	ND(0.096)	ND(0.096)	ND(0.096)	ND(0.096)	10.3

Table 2
Summary of Sediment and Bank Soil PCB Data
Former Hawthorne Mill Oxbow Area

Location ID	Sample Type	Date Collected	Sample ID	Dup ID	Depth Interval (in.)	Percent Solids	PCB Concentration (mg/kg)							Total PCB	TOC (%)
							Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260		
OPT5-6	Fine	8/18/2004	K25723		6-12	82	ND(0.061)	ND(0.061)	ND(0.061)	ND(0.061)	ND(0.061)	0.041 J	ND(0.061)	0.041 J	3.6
OPT5-7	Bank Soil	8/20/2004	K25713		0-6	90	ND(0.055)	ND(0.055)	ND(0.055)	ND(0.055)	ND(0.055)	ND(0.055)	ND(0.055)	ND(0.055)	4.5
OPT6-6	Coarse	8/18/2004	K25728		0-6	44	ND(0.11)	ND(0.11)	ND(0.11)	ND(0.11)	ND(0.11)	0.28	ND(0.11)	0.28	9.3
OPT6-6	Coarse	8/18/2004	K25729		12-18	87	ND(0.057)	ND(0.057)	ND(0.057)	ND(0.057)	ND(0.057)	ND(0.057)	ND(0.057)	ND(0.057)	0.15
OPT6-6	Coarse	8/18/2004	K25727		6-12	40	ND(0.12)	ND(0.12)	ND(0.12)	ND(0.12)	ND(0.12)	ND(0.12)	0.069 J	0.069 J	8.6
OPT6-7	Bank Soil	8/20/2004	K25714		0-6	77	ND(0.065)	ND(0.065)	ND(0.065)	ND(0.065)	ND(0.065)	0.044 J	ND(0.065)	0.044 J	12.7
OPT6-7	Bank Soil	8/20/2004	K25716		12-24	88	ND(0.057)	ND(0.057)	ND(0.057)	ND(0.057)	ND(0.057)	ND(0.057)	ND(0.057)	ND(0.057)	5.9
OPT6-7	Bank Soil	8/20/2004	K25715		6-12	92	ND(0.054)	ND(0.054)	ND(0.054)	ND(0.054)	ND(0.054)	ND(0.054)	ND(0.054)	ND(0.054)	16.8
OPT7-1	Bank Soil	8/20/2004	K25707		0-6	71	ND(0.070)	ND(0.070)	ND(0.070)	ND(0.070)	ND(0.070)	ND(0.070)	ND(0.070)	ND(0.070)	4.9
OPT7-1	Bank Soil	8/20/2004	K25709		12-24	69	ND(0.072)	ND(0.072)	ND(0.072)	ND(0.072)	ND(0.072)	ND(0.072)	ND(0.072)	ND(0.072)	2.8
OPT7-1	Bank Soil	8/20/2004	K25708		6-12	78	ND(0.064)	ND(0.064)	ND(0.064)	ND(0.064)	ND(0.064)	ND(0.064)	ND(0.064)	ND(0.064)	4.8
OPT7-3	Coarse	8/18/2004	K25732		0-6	87	ND(0.058)	ND(0.058)	ND(0.058)	ND(0.058)	ND(0.058)	ND(0.058)	ND(0.058)	ND(0.058)	0.54
OPT7-6	Coarse	8/18/2004	K25717		0-6	27	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	0.91	0.1 J	1.0 J	24
OPT7-6	Coarse	8/18/2004	K25724		6-12	83	ND(0.060)	ND(0.060)	ND(0.060)	ND(0.060)	ND(0.060)	ND(0.060)	ND(0.060)	ND(0.060)	0.79
OPT8-5	Coarse	8/18/2004	K25730	K25731	0-8	25	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	0.34	ND(0.20)	0.34	21
OPT8-5	Coarse	8/18/2004	K25731	K25730	0-8	24	ND(0.21)	ND(0.21)	ND(0.21)	ND(0.21)	ND(0.21)	0.23	ND(0.21)	0.23	19
OPT8-5	Coarse	8/18/2004	K25722		12-19	83	ND(0.060)	ND(0.060)	ND(0.060)	ND(0.060)	ND(0.060)	ND(0.060)	ND(0.060)	ND(0.060)	0.58
OPT8-5	Coarse	8/18/2004	K25726		8-12	71	ND(0.070)	ND(0.070)	ND(0.070)	ND(0.070)	ND(0.070)	ND(0.070)	ND(0.070)	ND(0.070)	2.6
OPT9-7	Bank Soil	8/20/2004	K25701		0-6	35	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.14)	1.2	0.2	1.4	13.4
OPT9-7	Bank Soil	8/20/2004	K25703		12-18	71	ND(0.070)	ND(0.070)	ND(0.070)	ND(0.070)	ND(0.070)	0.044 J	ND(0.070)	0.044 J	2.9
OPT9-7	Bank Soil	8/20/2004	K25702		6-12	71	ND(0.070)	ND(0.070)	ND(0.070)	ND(0.070)	ND(0.070)	0.17	ND(0.070)	0.17	2.4
OPT10-4	Coarse	8/18/2004	K25737		0-6	78	ND(0.064)	ND(0.064)	ND(0.064)	ND(0.064)	ND(0.064)	ND(0.064)	ND(0.064)	ND(0.064)	1.7
OPT10-5	Coarse	8/18/2004	K25754		0-6	78	ND(0.064)	ND(0.064)	ND(0.064)	ND(0.064)	ND(0.064)	ND(0.064)	0.051 J	0.051 J	2.2 J
OPT10-5	Coarse	8/18/2004	K25753		6-12	80	ND(0.063)	ND(0.063)	ND(0.063)	ND(0.063)	ND(0.063)	ND(0.063)	ND(0.063)	ND(0.063)	3.9 J
OPT10-7	Bank Soil	8/20/2004	K25704		0-6	58	ND(0.086)	ND(0.086)	ND(0.086)	ND(0.086)	ND(0.086)	0.053 J	ND(0.086)	0.053 J	5.1
OPT10-7	Bank Soil	8/20/2004	K25706		12-24	69	ND(0.072)	ND(0.072)	ND(0.072)	ND(0.072)	ND(0.072)	ND(0.072)	ND(0.072)	ND(0.072)	4.2
OPT10-7	Bank Soil	8/20/2004	K25705		6-12	63	ND(0.079)	ND(0.079)	ND(0.079)	ND(0.079)	ND(0.079)	ND(0.079)	ND(0.079)	ND(0.079)	4.9
OTP-5A-6	Fine	8/26/2004	K25768		0-6	88	ND(0.057)	ND(0.057)	ND(0.057)	ND(0.057)	ND(0.057)	ND(0.057)	ND(0.057)	ND(0.057)	0.91 J
OTP-5A-6	Fine	8/26/2004	K25771		12-18	31	ND(0.48)	ND(0.48)	ND(0.48)	ND(0.48)	ND(0.48)	3.0	0.36 J	3.4 J	11 J
OTP-5A-6	Fine	8/26/2004	K25769	K25770	6-12	37	ND(0.27)	ND(0.27)	ND(0.27)	ND(0.27)	ND(0.27)	1.6	0.31	1.9	8.8 J
OTP-5A-6	Fine	8/26/2004	K25770	K25769	6-12	39	ND(0.26)	ND(0.26)	ND(0.26)	ND(0.26)	ND(0.26)	1.4	0.22 J	1.6 J	10.6 J

Notes:

ND = Not detected.

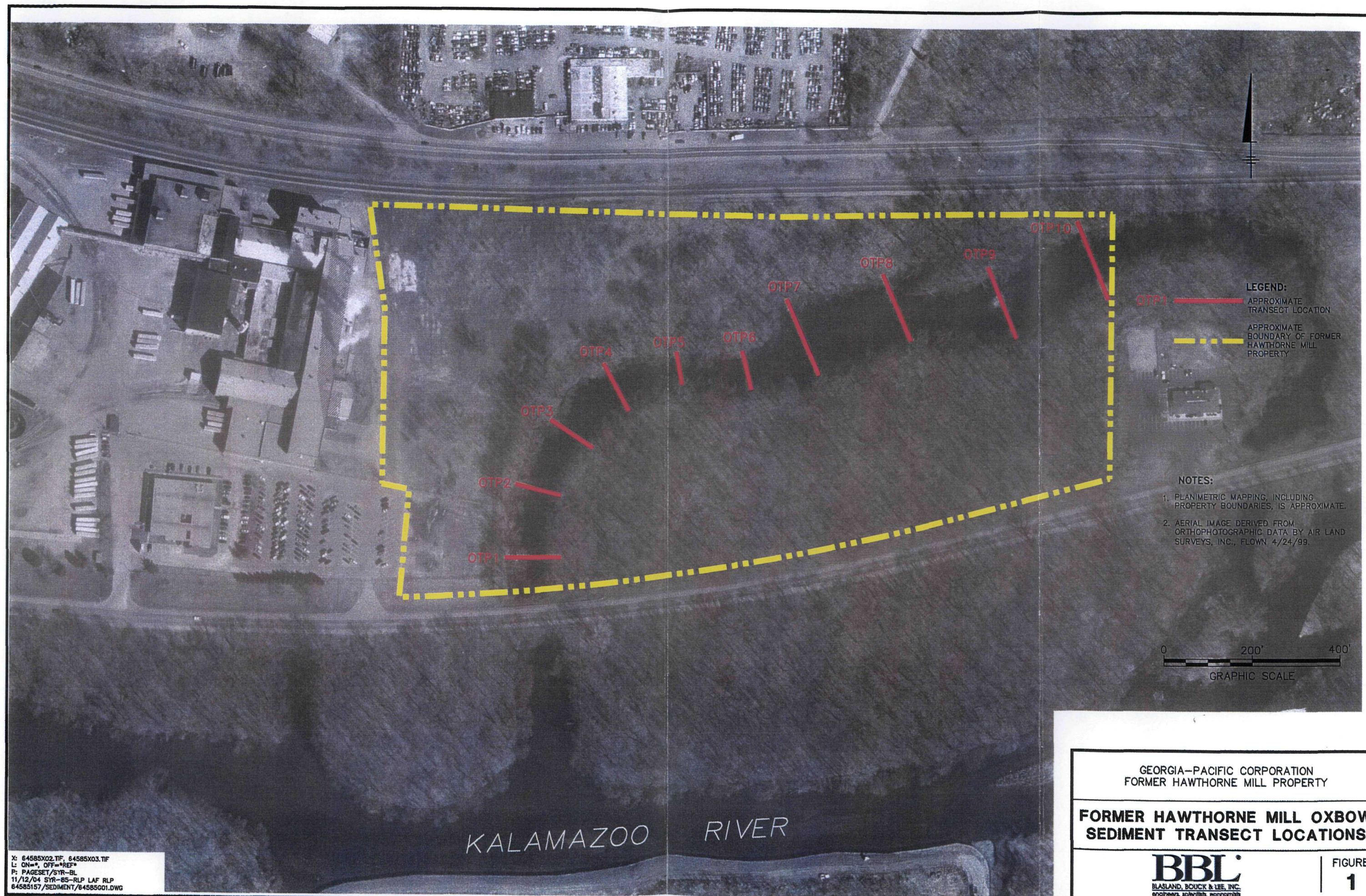
J = The compound was positively identified. However, the associated numerical value is an estimated concentration only.

U = The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

in = inches.

mg/kg = milligrams per kilograms.

Figures



X: 64585X02.TIF, 64585X03.TIF
 L: ON=*, OFF=REF*
 P: PAGESET/STY-BL
 T: 11/12/04 STY-BL LAF RLP
 64585157/SEDIMENT/64585001.DWG

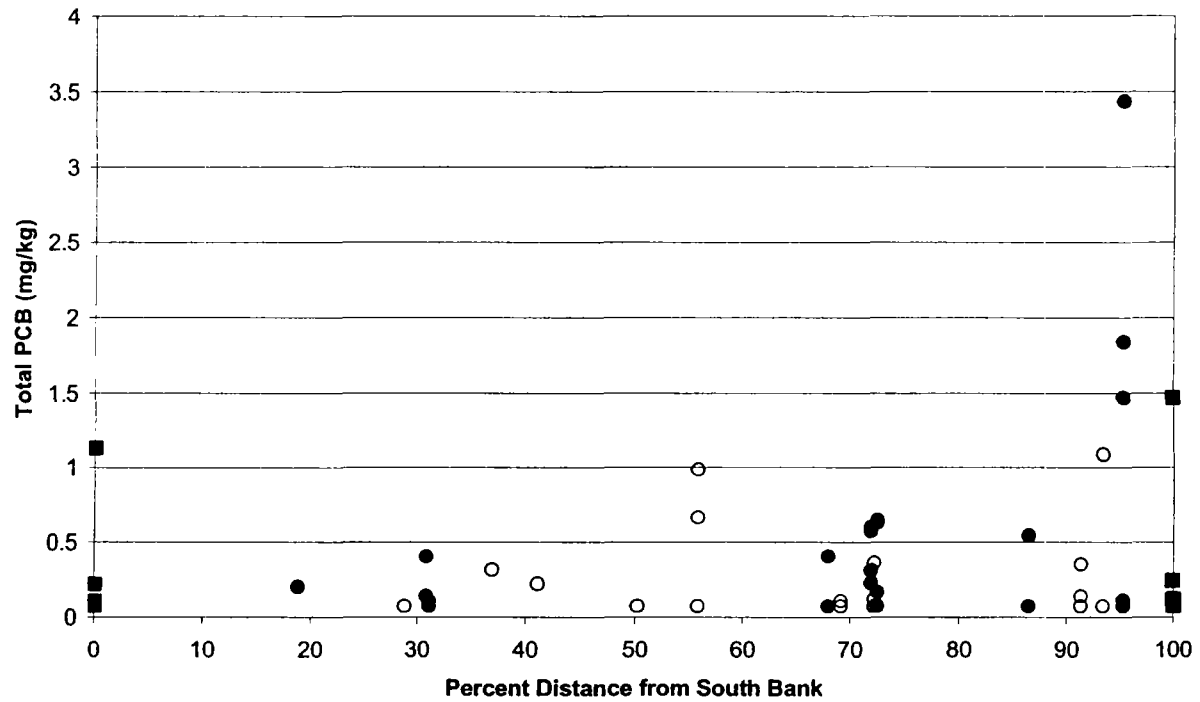
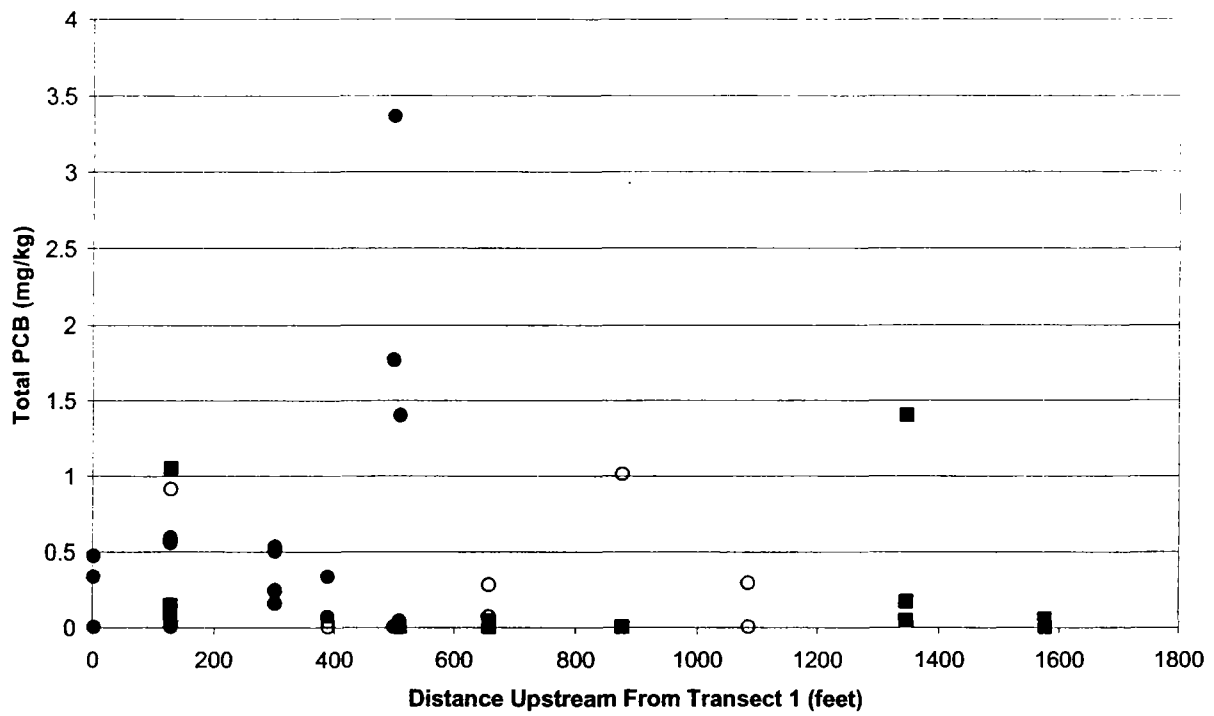
GEORGIA-PACIFIC CORPORATION
 FORMER HAWTHORNE MILL PROPERTY

FORMER HAWTHORNE MILL OXBOW SEDIMENT TRANSECT LOCATIONS

BBL
 BLASLAND, BOUCK & LEE, INC.
 engineers, scientists, economists

FIGURE
1





LEGEND

- Bank Soil
- Coarse Sediment
- Fine Sediment

GEORGIA-PACIFIC CORPORATION
FORMER HAWTHORNE MILL PROPERTY

TOTAL PCB CONCENTRATIONS BY DISTANCE

BBL
BANKS & BELL
INCORPORATED

FIGURE
3

Appendix A

1
Former Hawthorne Mill Property

Georgia Pacific Corporation

Oxbow Investigation

8/16/04 In Attendance: Tom O'Rourke > Survey
Mike Mathias > crew

- Mobilization to the site
- Survey Base line Recovery
- Start Layout of Oxbow Transects

8/17/04 In Attendance: Tom O'Rourke > Survey
Mike Mathias > Crew
Todd Merrell > Sediment
Brian Loomis > Collection

- Survey of Oxbow Transects
- Collection of Sediment Cores
- Probe for Sediment Depth
- Sample Collection consists of manually driving 3" Lexane core tubes into the sediment to refusal
- Probing consists of 5/8" O.D. steel calibrated probe rod

* Note: - 36" storm culvert pipe between OPT - 1 and 2 west side of oxbow

- Visual impacted sediment pocket just downstream of OPT - 5
- Visual Residuals on E/W at OPT - 5

Todd Merrell 8/17/04

Sediment Core Collection

3

Transect # 1
ID # OPT-1-6

Date 8/17/04
Time 1424

Water Depth 1.6'
Probe Depth 2.0' - silt over rocks, oil sheen
Penetration of Sediment 1.9'
Recovery of Sediment 1.7'

Visual Description through Lexane tube Digital Picture

0-2" - Brown fs, trace ms - cs

2"-20 - Dark brown silt, some fs

John R. Menden 8/17/04

4

Transect # 1
ID # OPT-1-5

Date: 8/17/04
Time: 1435

Water 2.6'
Probe 1.3' - silt over cs, gravels, oil sheen
Pen. 1.2'
Rec. 1.0'

Visual Description

0-4' - DK brown fs trace silt

4-12" - DK brown silt

Todd L. Henry

8/17/04

Sediment Core Collection

5

Transect # 1
ID # OPT-1-4

Date: 8/17/04
Time: 1450

Water. 0.7'

Probe. 2.8 - sand and silt over cs, gravels, oil sheen

Pen. 2.2'

Rec. 2.0

Visual Description

0-11" - Dark brown fs and silt

11"-23" - Dark brown silt

cs, gravels at bottom

Todd L. Plummer 8/17/04

Transect 1
ID# OPT-1-3

Date 8/17/04
Time 1510

Water	0.0'	Exposed Sediment
Probe.	3.7'	
Pen.	3.4'	
Rec.	2.7'	

Visual Description

0-7" - Dark brown fs and silt

7-23" - Dark grey, silt

23-32" - Grey ms to vcs, gravels

Bill Menn 8/17/04

Sediment Core Collection

Transect #
ID#

1
OPT-1-2

Date: 8/17/04
Time: 1520

Water

0.0'

Exposed Sediment

Probe

3.4'

Pen

3.3'

Recu

2.8'

Visual Description

0-9" - Dark brown silt

9-21" - Brown fs with silt

21-34" - Brown f-ms over f-c sands, gravel

John L. Munn 8/17/04

Transect[#] 2
ID[#] OPT-2-2

Date: 8/17/04
Time: 1540

Water. 0.0'
Probe. 0.3' - coarse sand and gravels
Pen. 0.3'
Rec. 0.2'

Visual Description

0-3" - Dark brown silt over mottles, gravel

Todd Plummer 8/17/04

Sediment Core Collection

Transect # 2
ID # OPT-2-3

Date 8/17/04
Time 1550

Water : 0.2'

Probe : 0.5' - f-m sand over coarse sand and gravel

Pen : 0.5'

Rec : 0.5'

Visual Description

0-1" - Brown fs trace m-c sand

1-6" - Dark brown f-m sand over cs and
fine gravel

John H. Hume 8/17/04

Transect [#] 2
ID # OPT-2-4

Date 8/17/04
Time 1605

Water 0.8'
Probe 4.4' - silt and sands over silt over m-c sand,
Pen 4.4' gravels, oil sheen
Rec. 3.8'

Visual Description

0-4" - Dark brown fs

4-22" - Dark brown silt some fs

22"-44" - ms to vcs, fine gravel

Bill Munn 8/17/04

Sediment Core Collection

Transect #
ID #

2
OPT-2-5

Date: 8/17/04
Time: 1620

Water

1.3'

Probe

4.5'

Pen

4.3'

Rec

3.1'

- sands over silt over cs, gravels, o.s/sh

Visual Description

0-8" - Brown fs trace m-c sand, gravel

8"-33" - Dark brown silt, some fs

33"-38" - Dark brown ms to vcs, gravel

Bob Mend 8/17/04

Transect# 2
ID# OPT-2-6

Date 8/17/09
Time 1630

Water 0.4'
Probe 1.8'
Pen. 1.6'
Rec 1.3'

Visual Description

0-3" - Dr Brown f-sand with m-c sands

3"-15" - Dark brown / grey f-c sands, fine gravel

Sediment Core Collection

13

Transect # 3
ID # OPT-3-2

Date 8/17/04
Time 1635

Water 0.0'
Probe 0.6'
Pen 0.5'
Rec 0.5'

Visual Description

0-6" - DK brown silt with fs over cs, gravel
at bottom

Transect#
ID#

OPT-3-3

Date 2/17/04
Time 1645

Water

0.0'

Exposed Sediment

Probe

1.0'

Pen

0.7'

Rec

0.6'

Visual Description

0-7" - Dk brown fs with silt over cs, gravel
at bottom

Sediment Core Collection

15

Transect#
ID#

OPT-3-4

Date: 8/17/04
Time: 1655

<u>Water</u>	1.1'
<u>Polae</u>	1.5'
<u>Pen</u>	1.3'
<u>Ree</u>	1.7'

Visual Description

0'-4' - DK Brown fs, trace ms.

4'-13' - Black fs with m-cs, gravel at bottom

Transsect #
ID #

3
OPT-3-5

Date 8/17/04
Time 1700

Water 1.5'
Probe 3.0'
Pen 3.0'
Ree 2.65'

9 oil sheen while probing

Visual Description

- 0-10" - Brown f-m sand trace cs, fine gravel
10-37" - DK grey/black silt trace fs
37-39" - DK grey silt with f-cs, gravel

Sediment Core Collection

Transect*
ID#

3

OPT-3-6

Date

8/17/04

Time

1715

Water: 0.2'

Probe: 0.6'

Pen: 1.2'

Ree: 1.1'

- Possible Grey silt, oil sheen white pot

Visual Description

0-3 Brown fine sand Some Silt trace MS

3-132 gray Silt

12-13 gray fine MS trace coarse sand and gravel

Transect # 4
ID # OPT-4-2

Date 8/17/04
Time 1930

<u>Water</u>	0.0'	Exposed sediment
<u>Probe</u>	1.3'	
<u>Pen</u>	1.2'	
<u>Rec</u>	1.0'	

Visual Description

0-12 Dark brown Silt Trace FS

Sediment Core Collection

16

Transect #
ID #

4
OPT-4-3

Date: 8/17/04
Time: 1745

Water 0.0'
Probe 1.2'
Pen 1.1'
Ree 1.1'

Exposed Sediment

Visual Description

0-11 Dark brown Silt Trace FS

Transect # 4
ID # OPT- 4-4

Date 8/17/04
Time 1755

Water 0.8'
Probe 0.5'
Pen. 1.8'
Rec. 1.2'

Visual Description

0-3 Brown FS Trace Silt
3-8 Dark Brown Silt and F-C sand
8-14 Gray F-C sand and Fine gravel

Sediment Core Collection

21

Transect #
ID #

4
OPT-4-5

Date: 8/17/04
Time: 1810

Water 0.9
Probe 1.7'
Pen 1.8'
Ree 1.5'

Visual Description

0-2 Sand

2-10 Dark gray to Black Silts Some fine medium Sand

10-18 Fair m Sand Coarse Sand and gravels

Transect # 4
ID OPT - 4-6

Date 8/17/04
Time 1820

Water 0.0' Exposed Sediment
Probe. 0.7'
Pen. 0.7'
Rec. 0.6'

Visual Description

0-2 Dark Brown Silt

2-3 White / gray calcite Material

3-7 Brown Silt F-C Sands Fine gravel

Sediment Core Collection

23

Transect # 5
ID # OPT-5-2

Date 8/18/04
Time 0750

<u>Water</u>	0.0'	Exposed Sediment
<u>Roar</u>	1.2	- Silt over CS, gravel
<u>Pen</u>	1.1	
<u>Rec</u>	1.0	

Visual Description

0-3 Dark Brown Silt Trace FS

3-6 Dark Brown Silt

6-12 Silt with M-VCS and Fine gravel

Transect # 5
ID # OPT-5-3

Date 8/18/04
Time 0805

<u>Water</u>	0.0'	Exposed Sediment
<u>Probe</u>	0.9'	- silt over cs, gravel
<u>Pen</u>	0.8'	
<u>Rec</u>	0.7'	

Visual Description

0-2 Brown fine sand with some silt

2-7 Dark gray / Brown silt

Sediment Core CollectionTransect #

5

ID #

OPT-5-4

Date

8/18/04

Time

0810

Sater

0.5'

Probe

0.4'

Pen

0.6'

Rec

0.5'

Visual Description

- 0-2 Brown fine Sand trace organics
2-7 Dark Brown M-VCS fine gravel

Transect[#] 5
ID OPT-5-5

Date 8/18/0
Time 0815

Water 0.6'
Probe 1.5' - Sands
Pen 1.4'
Ree 1.3'

Visual Description

0-4 Brown fine and MS

4-8 Dark gray to Black fine to MSand trace coarse sand

8-15 Dark gray to Black M-VC Sand and gravel

Sediment Core Collection

27

Transect #
ID #

5
OPT - 5-6

Date 8/18/04
Time 0820

Water 0.0' - Exposed Sediment
Probe 2.8'
Pen 2.4'
Ree 1.9'

Visual Description

0-5 Brown f-M Sand trace coarse sand and silt

5-19 Dark gray Silt with fine sand trace and M-coarse

19-22 dark gray ~~fine~~ fine to coarse sand some
fine gravel

Transect #
ID #

⁶
OPT-6-2

Date: 8/18/04
Time: 0830

<u>Water</u>	0.0	- Exposed Sediment
<u>Rohe</u>	0.9	
<u>Pen</u>	0.7	
<u>Rec</u>	0.6	

Visual Description

0-1 Dark Brown Silt Some fine sand Some
fine gravel

1-8 gray m-very coarse sand with fine gravel

Sediment Core CollectionTransect #
ID #6
OPT-6-3Date 8/18/04
Time 0840

<u>Water</u>	0.9'	
<u>Probe</u>	1.0'	- fs and silt over coarse sands
<u>Pen</u>	0.8'	and gravels
<u>Rec</u>	0.6	

Visual Description

0-7 Brown to dark Brown fine Sand trace Silt
over coarse sand and gravel

Transect #
ID #

⁶
OPT-6-4

Date 8/18/04
Time 0845

<u>Water</u>	0.8'	
<u>Probe</u>	0.4'	- Sands and gravels
<u>Pen</u>	1.0'	
<u>Rec.</u>	0.9'	

Visual Description

0-1 Brown fine sand trace silt

1-10 gray M-Vc Sand fine gravel

Sediment Core Collection

31

insect #
ID #

6
OPT-6-5

Date 8/18/04
Time 0850

Water 0.8'

Probe 0.7' - silt over sands and gravel

Pen 1.9'

Rec 1.5'

Visual Descriptors

0-2 Brown fine sand trace MS

2-18 gray M-VL sand and gravel

Transsect #
ID # OPT 6-6

Date 8/18/04
Time 0900

Water 0.0' - Exposed Sediment
Rohe 2.3' - Silt over sands and gravels
Pen 2.0'
Rec 1.8'

Visual Description

0-4 Dark Brown Silt

4-8 Dark Brown fine - M Sand trace coarse Sand
 and organics

8-16 Dark Brown Silts trace fine Sand

16-22 Tan M-VL Sands and gravels

Sediment Core CollectionTransect #
ID #7
OPT 7-2Date 8/18/04
Time 0920

<u>Water</u>	0.6	0.0'	- Exposed sediment
<u>Probe</u>	0.8	0.9'	- silt, sand and gravel
<u>Pen</u>	0.6	0.8'	
<u>Rec</u>	0.5	0.6'	

Visual Description

0-6 Brown fine sand over M-Vc sand

Transect # 7
ID # OPT-7-3

Date 8/18/04
Time 0935

Water 0.6'
Probe 0.8'
Pen 0.6'
Rec 0.5'

Visual Description

0-7 Brown fine to very C Sands and
gravel

Sediment Core Collection

35

Transect #
ID #

7
OPT-7-4

Date 8/18/04
Time

Water 0.0' - Exposed Sediment
Probe 1.2' - silt and sand over sands and gravel
Pen 1.5'
Ree 1.1'

Visual Description

0-2 Dark Brown silt to fine - MS
2-14 Dark Brown to gray f - VC sand and
fine gravel

Transect #
ID #

7
OPT-7-5

Date 8/18/04
Time 0950

Water : 0.0' - Exposed Sediment
Probe : 2.5' - Silts and sands over sands and gravel
Pen : 2.3'
Rec : 2.0'

Visual Description

0-11 Dark Brown Silt Some fine Sand

~~11-24~~

11-24 gray fine Sand with M-Coarse Sand
and fine gravel

Sediment Core Collection

37

Transect # 7
ID # OPT-7-6

Date 8/18/04
Time 1000

Water 0.0 - Exposed Sediment
Barrel 2.3'
Pen 1.5'
Ree 1.0'

Visual

0-8 Dark Brown Silt Some fine Sand
8-12 Tan fine to V-Coarse Sand and gravel

Transsect 8
ID# OPT-8-2

Date 8/18/04
Time 1010

Water - 0
Probe - 3.0
Pen - 2.3
Rec - 1.7

Visual Description

0-6 Dark Brown fine - coarse sand
6-11 fine sand and silt
11-20 Dark Brown V - coarse sand and
gravel

9

Transsect 8
ID # OPT-8-3

Date 8/18/04
Time 10:20

water - 1.1
Probe - 0.7
en - 1.5
ss - 1.2

Visual Description

0-3 Dark Brown Very fine sand and silts

3-14 Dark Brown fine and coarse sand
sills and gravel

Transsect 8
ID# OPT-8-4

Date: 8/18/04
Time: 10:20

Water - 0.1
Probe - 0.7
Pen - 0.8
Rec - 0.7

Visual Description

0-10 Dark gray very coarse rocks
and gravel

Transect 8
ID # -8-5

Date: 8/18/04
Time: 10:30

Water - 0
Probe - 3.0
Cn - 2.0
Dec - 1.6

Visual Description

~~2-10 Dark gray very coarse rocks and gravel~~

0-8 Light gray Sands and Silts

8-14 Light gray coarse - v coarse gravel

14-19 light gray sand and silts

42

Transect 8
ID # OPT 8-6

Date: 8/18/11
Time: 10:40

Water - 0
Probe - 2.9
Pen - 22
Rec - 1.5

Visual Description

0-2 Black Sands

2-3 white organic with fine sand

3-17 Dark Brown Sand and Silt

43

Transect 9
ID # OPT 9-2

Date 8/18/04
Time: 13:45

water: 1
Probe - 2.4
Pen - 2.2
Rec - 1.9

Visual Description

0-2 Light gray fine sand and silts

2-19 Dark Brown fine Sand and silts

9-22 Light gray fine sand and silts

44

Transact 9
ID # OPT 9-3

Date 8/18/04
Time 1356

Water - 1.0
Probe - 1.5
Pen - 1.5
Rec - 1.3

Visual Description

0-1 Light gray - fine sand and silt

1-7 - Light gray fine to coarse gravel

7-15 Dark Brown fine sand and silt

45

Transect 9
ID# 9-4

Date 8/18/04
Time 14:00

Water - 0
Probe - 1.8
Pen - 1.8
Rec - 1.7

Visual Description

2-+

1-5 Brown Sand and Sills

5-15 ~~B~~ Brown Fine - Coarse gravel
fine sand and sills

15-21 Dark Brown Sand and Sills

4/6

Transcel 9
ID # OPT 9-5

Time 1405
Date 8/18/04

Water - 0.6

Probe - 0.6

Pen - 0.5

Rec - 0.5 - Sand over ~~silt~~ gravel

Visual Description

7

Transsect 9
ID# OPT 9-6

Date: 8/18/04
Time - 1410

Water - 0.3

Sube - 0.7

1 - 0.6

2 - 0.6

- Sand over gravel

Visual Description

-3 gray coarse gravel and fine sands

7 Dark gray sand and silts

48

Transect 10
ID# OPT 10-2

Date: 8/18/04
Time: 14:30

Water - 0.3

Probe - 4.0

Pen - 3.8

Sec - 3.5

Visual Description

~~12~~

~~13~~

0-17 - Dark Brown Sand and Silts

17-24 - Dark Brown Sand's to Medium
course gravel

24-41 Dark Brown Sand and Silts

119

Transsect 10
ID# OPT 10-3

Date 8/18/04
Time 1435

Water - 1.1
Probe - 2.0
Pen - 1.7
Rec - 1.5

Visual Description

0-5' Dark Brown Sand and Silts

5-11' Black Sand and Silts

1-18' Light Brown Medium coarse gravel

50

Transect 10

ID # OPT 10-4

Date 8/18/04

Time 1445

Water - 2.1

Probe - 1.5

Pen - 1.0

Sec - 0.8 - Sand over coarse sand
and gravel

Visual Description -

AS - fine sand and silts with
coarse gravel

-1

Transect 10
ID# OPT 10-5

Date 8/18/04
Time 1450

Water - 2.1

Probe - 1.2

Pen - 1.1

Pec - 1.0 - Coarse sand + gravel

Visual Description

0-7 Brown sand and silt with M-C gravel

7-12 light gray sand and silt

52

Transect 10
ID# OPT 10-6

Date 8/18/04
Time 1505

Water - 0
Probe - 1.4
Pen - 1.4
ICC - 1.3

Visual Description

~~0-4~~

0-8 - Dark Brown Silts and Sand
8-16 White Calcite with fine Sand

Appendix B

DATA REVIEW FOR
ALLIED PAPER, INC./PORTAGE CREEK/KALAMAZOO RIVER
SUPERFUND SITE

SDG# KAL392

PCB AND
TOC ANALYSES

UPPER RIVER

Analyses performed by:

Severn Trent Laboratories
Sacramento, California

Review performed by:

Blasland, Bouck & Lee, Inc.
Syracuse, New York

BBL
BLASLAND, BOUCK & LEE, INC.
engineers & scientists

Summary

The following is an assessment of the data package for SDG# KAL392 for sediment sampling at the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site. Included with this assessment are the data review check sheets used in the review of the package and the corrected sample analysis data summary sheets. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Date	Analyses					
				VOA	BNA	PCB	TAL	TOC	P.SIZE
K25701	583797	soil	8/20/04			x		x	
K25702	583798	soil	8/20/04			x		x	
K25703	583799	soil	8/20/04			x		x	
K25704	583800	soil	8/20/04			x		x	
K25705	583801	soil	8/20/04			x		x	
K25706 ¹	583802	soil	8/20/04			x		x	
K25707	583803	soil	8/20/04			x		x	
K25708	583804	soil	8/20/04			x		x	
K25709	583805	soil	8/20/04			x		x	
K25710	583806	soil	8/20/04			x		x	
K25711	583807	soil	8/20/04			x		x	
K25712	583808	soil	8/20/04			x		x	
K25713	583809	soil	8/20/04			x		x	
K25714	583810	soil	8/20/04			x		x	
K25715	583811	soil	8/20/04			x		x	
K25716 ¹	583812	soil	8/20/04			x		x	

1 MS/MSD analysis performed on sample

PCB ANALYSES

Introduction

Analyses were performed according to the USEPA SW-846 method 8082.

The data review process is intended to evaluate the data on a technical basis. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with National Functional Guidelines:

- U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
- J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
- B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.
- JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.
- P The difference in the quantitated results for the two columns was greater than 25%. The reported value may be biased.
- E The compound was quantitated above d.
- D Concentration is based on a diluted sample analysis.
- UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
- R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant QC problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Time

The specified holding times for PCB analyses of soil/sediment samples are 14 days from sample collection to extraction and 40 days to analysis.

All samples were analyzed within the specified holding time.

2. Blank Contamination

Quality assurance blanks, i.e., method, field or rinse blanks, are prepared to identify any contamination which may have been introduced in to the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Field and rinse blanks measure contamination of samples during field operations.

No Aroclors were detected in the method blank. No rinse blanks were submitted with the samples.

3. System Performance

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method allows a maximum RSD of 20%. Multi-point calibration was performed for Aroclors 1016, 1221, 1232, 1242, 1248, 1254, and 1260.

All the multi-point calibrations were acceptable.

4.2 Continuing Calibration

A maximum %D of 15 is allowed.

All continuing calibration standards were within the specified limit

5. Surrogates / System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique.

All surrogate recoveries were within control limits.

6. Compound Identification

The retention times of all quantitated peaks must fall within the calculated retention time windows for both the primary and confirmation columns.

All quantitated peaks fell within the appropriate retention time windows.

7. Matrix Spike/Matrix Spike Duplicate/Matrix Spike Blank

Matrix spike and matrix spike duplicate data are used to assess the precision and accuracy of the analytical method.

All matrix spike and matrix spike duplicate recoveries and relative percent differences between recoveries were within control limits. All matrix spike blank recoveries were also within control limits.

8. Field Duplicates

The field duplicate was not submitted with this SDG.

9. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines listed in the analytical method.

DATA REVIEW CHECKLIST

PCB Data Review Checklist

	YES	NO	NA
<u>Data Completeness and Deliverables</u>			
Is there a narrative or cover letter present?	<u> X </u>	<u> </u>	<u> </u>
Are the sample numbers included in the narrative?	<u> </u>	<u> X </u>	<u> </u>
Are the sample chain-of-custodies present?	<u> X </u>	<u> </u>	<u> </u>
Do the chain-of-custodies indicate any problems with sample receipt or sample condition?	<u> </u>	<u> X </u>	<u> </u>
<u>Holding Times</u>			
Have any holding times been exceeded?	<u> </u>	<u> X </u>	<u> </u>
<u>Surrogate Recovery</u>			
Are surrogate recovery forms present?	<u> </u>	<u> X </u>	<u> </u>
Are all the samples listed on the appropriate surrogate recovery form?	<u> </u>	<u> </u>	<u> X </u>
Were surrogate recoveries outside of specified limits for any sample or blank?	<u> </u>	<u> X </u>	<u> </u>
If yes, were the samples reanalyzed?	<u> </u>	<u> </u>	<u> X </u>
<u>Matrix Spikes</u>			
Is there a matrix spike recovery form present?	<u> X </u>	<u> </u>	<u> </u>
Were matrix spikes analyzed at the required frequency?	<u> X </u>	<u> </u>	<u> </u>
How many spike recoveries were outside of QC limits?			
<u> 0 </u> out of <u> 4 </u>			
How many RPDs for matrix spike and matrix spike duplicate were outside of QC limits?			
<u> 0 </u> out of <u> 2 </u>			
<u>Blanks</u>			
Is a Method Blank Summary Form present?	<u> </u>	<u> X </u>	<u> </u>
Has a method blank been analyzed for each set of samples or for each 20 samples, whichever is more frequent?	<u> X </u>	<u> </u>	<u> </u>
Do any method/instrument blanks have positive results?	<u> X </u>	<u> </u>	<u> </u>
Are there field/rinse blanks associated with every sample?	<u> </u>	<u> X </u>	<u> </u>
Do any field/rinse blanks have positive results?	<u> </u>	<u> </u>	<u> X </u>
<u>Calibration and GC Performance</u>			
Are the following chromatograms and data printouts present?			
Aroclor 1016	<u> X </u>	<u> </u>	<u> </u>
Aroclor 1221	<u> X </u>	<u> </u>	<u> </u>
Aroclor 1232	<u> X </u>	<u> </u>	<u> </u>

PCB Data Review Checklist - Page 2

	YES	NO	NA
Aroclor 1242	<u>X</u>	<u> </u>	<u> </u>
Aroclor 1248	<u>X</u>	<u> </u>	<u> </u>
Aroclor 1254	<u>X</u>	<u> </u>	<u> </u>
Aroclor 1260	<u>X</u>	<u> </u>	<u> </u>
Are Initial Calibration Summary Forms present and complete for each column and analytical sequence?	<u>X</u>	<u> </u>	<u> </u>
Are the linearity criteria for the initial analyses within limits for both columns (20% RSD)	<u>X</u>	<u> </u>	<u> </u>
Have all samples been injected within a 12 hour period beginning with the injection of a calibration standard?	<u>X</u>	<u> </u>	<u> </u>
Is a Calibration Verification Summary Form present and complete for each continuing standard analyzed?	<u>X</u>	<u> </u>	<u> </u>
Are %D values for all compounds within limits (15%)?	<u> </u>	<u>X</u>	<u> </u>
<u>Analytical Sequence Check</u>			
Is a analytical sequence form present and complete for each column and each period of analyses?	<u>X</u>	<u> </u>	<u> </u>
Was the proper analytical sequence followed?	<u>X</u>	<u> </u>	<u> </u>
<u>Cleanup Efficiency Verification</u>			
Are percent recoveries of the compounds used to check the efficiency of the cleanup procedure within QC limits?	<u>X</u>	<u> </u>	<u> </u>
<u>PCB Identification</u>			
Is a sample analysis data summary sheet present for every sample?	<u>X</u>	<u> </u>	<u> </u>
Were the retention times of all quantitated peaks within the appropriate retention time windows?	<u>X</u>	<u> </u>	<u> </u>
Have all positively identified analytes been confirmed on a second column?	<u>X</u>	<u> </u>	<u> </u>
Were there any false negatives?	<u> </u>	<u>X</u>	<u> </u>
Was GC/MS confirmation provided when required?	<u> </u>	<u> </u>	<u>X</u>
<u>Compound Quantitation and Reported Detection Limits</u>			
Are the reporting limits adjusted to reflect sample dilutions, and, for soils, sample moisture?	<u>X</u>	<u> </u>	<u> </u>
<u>Chromatogram Quality</u>			
Were the baselines stable?	<u>X</u>	<u> </u>	<u> </u>
Were any electronegative displacement (negative peaks) or unusual peaks detected?	<u> </u>	<u>X</u>	<u> </u>
<u>Field Duplicates</u>			

PCB Data Review Checklist - Page 3

	YES	NO	NA
Were field duplicates submitted with the samples?	<u>X</u>	<u> </u>	<u> </u>

[illegible]

Qualifiers:
D Surrogates diluted out
! Recovery high
! Recovery low

kal292.wpd

PCB Calibration Summary

Instrument: GC#HP-2865
 Column: RTX-5

Date:	9/08/04	9/09/04	9/09/04	9/09/04	9/09/04	9/09/04	9/09/04	
Time:		09:00	09:24	14:33	14:56	16:55	17:19	
	Initial Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.
	%RSD	%D	%D	%D	%D	%D	%D	%D
Aroclor 1016	ok							
Aroclor 1221	ok							
Aroclor 1232	ok							
Aroclor 1242	ok		ok					
Aroclor 1248	ok	ok		ok		ok		
Aroclor 1254	ok				ok			
Aroclor 1260	ok						ok	
Tetrachloro-m-xylene	ok							
Decachlorobiphenyl	ok							
Affected Samples:								

* Single-point calibration

CORRECTED ANALYSIS SUMMARY FORMS

TOTAL ORGANIC CARBON

Introduction

Analyses were performed according to the following method:

Total Organic Carbon

EPA Lyod Khan

The data review process is intended to evaluate data on a technical basis. It is assumed that the data package represents the best efforts of the laboratory and has already been subjected to adequate quality review prior to submission for review.

During the review process, laboratory data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, modified or deleted by the data reviewer. Results are qualified with the following codes in accordance with the National Functional Guidelines.

- U The material was analyzed for, but was not detected. The associated value is either the sample quantitation limit or the sample detection limit depending on the method.
- J The associated value is an estimated quantity.
- UJ The material was analyzed for, but was not detected. The associated value is approximate and may or may not represent the actual limit of quantitation/detection.
- R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant QC problems, the analysis is *invalid and provides no information as to whether the compound is present or not*. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Times

The method specified holding time is 14 days from sample collection to analysis the QAPP specific holding time is 28 days.

All samples were analyzed with the 28 day holding time.

2. Calibration

All initial and continuing calibration data were acceptable.

3. Blank Contamination

No method blank contamination was reported.

4. Matrix Spike/Matrix Spike Duplicate

Matrix spike and matrix spike duplicate data are used to assess the precision and accuracy of the analytical method.

The MS/MSD recoveries were within control limits.

5. Laboratory Control Sample (LCS)

The laboratory control sample recoveries were within control limits.

6. Field Duplicate

No field duplicate samples were submitted with this SDG.

7. Overall Assessment

Other than for those deviations noted in this review, the analysis of the samples was in conformance with method specifications.

DATA REVIEW CHECKLIST

Supplemental Data Review Checklist

	YES	NO	NA
<u>Data Completeness</u>			
Is there a narrative or cover letter present?	<u> X </u>	<u> </u>	<u> </u>
Are the sample numbers included in the narrative?	<u> </u>	<u> X </u>	<u> </u>
Are the methods utilized notated?	<u> X </u>	<u> </u>	<u> </u>
Are the sample chain-of-custodies present?	<u> X </u>	<u> </u>	<u> </u>
Do the chain-of-custodies indicate any problems with sample receipt or sample condition?	<u> </u>	<u> X </u>	<u> </u>
<u>Holding Times</u>			
Have any holding times been exceeded?	<u> </u>	<u> </u>	<u> X </u>
<u>Matrix Spike/Matrix Spike Duplicates</u>			
Were matrix spikes analyzed and were the results within acceptable limits?	<u> X </u>	<u> </u>	<u> </u>
<u>Laboratory Control Samples</u>			
Were LCS analyzed and were recoveries within acceptable limits?	<u> X </u>	<u> </u>	<u> </u>
<u>Blanks</u>			
Has a method blank been analyzed for each set of samples or for each 20 samples?	<u> X </u>	<u> </u>	<u> </u>
Do any have results above the reporting limit?	<u> </u>	<u> X </u>	<u> </u>
Do any trip/field/rinse blanks have positive results?	<u> </u>	<u> </u>	<u> X </u>
<u>Calibration</u>			
Was the calibration acceptable?	<u> X </u>	<u> </u>	<u> </u>
<u>Raw Data</u>			
Is raw data present and complete for all samples and QC?	<u> X </u>	<u> </u>	<u> </u>
<u>Compound Quantitation and Reported Limits</u>			
Are the reporting limits adjusted to reflect sample dilutions, and for soils, sample moisture?	<u> X </u>	<u> </u>	<u> </u>

TOTAL ORGANIC CARBON RESULTS

SUPPORTING DOCUMENTATION

DATA REVIEW FOR
ALLIED PAPER, INC./PORTAGE CREEK/KALAMAZOO RIVER
SUPERFUND SITE

SDG# KAL393

PCB AND
TOC ANALYSES

UPPER RIVER

Analyses performed by:

Severn Trent Laboratories
Sacramento, California

Review performed by:

Blasland, Bouck & Lee, Inc.
Syracuse, New York

BBL
BLASLAND, BOUCK & LEE, INC.
engineers & scientists

Summary

The following is an assessment of the data package for SDG# KAL393 for sediment sampling at the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site. Included with this assessment are the data review check sheets used in the review of the package and the corrected sample analysis data summary sheets. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Date	Analyses					
				VOA	BNA	PCB	TAL	TOC	P.SIZE
K25738	583813	soil	8/17/04			x		x	
K25740 ¹	583814	soil	8/17/04			x		x	
K25741	583815	soil	8/17/04			x		x	
K25742	583816	soil	8/17/04			x		x	
K25743	583817	soil	8/17/04			x		x	
K25744	583818	soil	8/17/04			x		x	
K25745	583819	soil	8/17/04			x		x	
K25746 ¹	583820	soil	8/17/04			x		x	
K25747	583821	soil	8/17/04			x		x	
K25748	583822	soil	8/17/04			x		x	
K25749	583823	soil	8/17/04			x		x	
K25750	583824	soil	8/17/04			x		x	
K25751	583825	soil	8/17/04			x		x	
K25752 ¹	583826	soil	8/17/04			x		x	
K25753	583827	soil	8/17/04			x		x	
K25754	583828	soil	8/17/04			x		x	
K25755	583829	soil	8/17/04			x		x	

¹ MS/MSD analysis performed on sample

PCB ANALYSES

Introduction

Analyses were performed according to the USEPA SW-846 method 8082.

The data review process is intended to evaluate the data on a technical basis. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with National Functional Guidelines:

- U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
- J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
- B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.
- JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.
- P The difference in the quantitated results for the two columns was greater than 25%. The reported value may be biased.
- E The compound was quantitated above d.
- D Concentration is based on a diluted sample analysis.
- UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
- R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant QC problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Time

The specified holding times for PCB analyses of soil/sediment samples are 14 days from sample collection to extraction and 40 days to analysis.

All samples were analyzed within the specified holding time.

2. Blank Contamination

Quality assurance blanks, i.e., method, field or rinse blanks, are prepared to identify any contamination which may have been introduced in to the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Field and rinse blanks measure contamination of samples during field operations.

No Aroclors were detected in the method blank. No rinse blanks were submitted with the samples.

3. System Performance

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method allows a maximum RSD of 20%. Multi-point calibration was performed for Aroclors 1016, 1221, 1232, 1242, 1248, 1254, and 1260 only.

All the multi-point calibrations were acceptable.

4.2 Continuing Calibration

A maximum %D of 15 is allowed.

5. Surrogates / System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique.

Recoveries for one surrogate were outside control limits in samples K25742, K25743, K25752, K25752MS and K25752MSD. Since recoveries for the remaining surrogate were within control limits, no data have been qualified based on the deviations. Surrogates were diluted in samples K25740MS, K25740MSD, K25746MS, K25746MSD, K25752MS, and K25752MSD. No data have been qualified based on the diluted surrogates.

All other surrogate recoveries were within control limits.

6. Compound Identification

The retention times of all quantitated peaks must fall within the calculated retention time windows for both the primary and confirmation columns.

All quantitated peaks fell within the appropriate retention time windows.

7. Matrix Spike/Matrix Spike Duplicate/Matrix Spike Blank

Matrix spike and matrix spike duplicate data are used to assess the precision and accuracy of the analytical method.

All matrix spike and matrix spike duplicate recoveries and relative percent differences between recoveries were within control limits. All matrix spike blank recoveries were also within control limits.

8. Field Duplicates

Results for field duplicate samples are summarized as follows:

Sample ID	Compound	Parent Result	Field Duplicate	RPD
K25747/K25748	Total PCB	ND	ND	NA
K25741/K25742	Total PCB	130	150	14.3%

* RPD based on total PCB content.

ND Not detected.

NA Analyte not detected in sample and/or duplicate. RPD not applicable.

The field duplicate results are acceptable.

9. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines listed in the analytical method.

DATA REVIEW CHECKLIST

PCB Data Review Checklist

	YES	NO	NA
<u>Data Completeness and Deliverables</u>			
Is there a narrative or cover letter present?	<u> X </u>	<u> </u>	<u> </u>
Are the sample numbers included in the narrative?	<u> </u>	<u> X </u>	<u> </u>
Are the sample chain-of-custodies present?	<u> X </u>	<u> </u>	<u> </u>
Do the chain-of-custodies indicate any problems with sample receipt or sample condition?	<u> </u>	<u> X </u>	<u> </u>
<u>Holding Times</u>			
Have any holding times been exceeded?	<u> </u>	<u> X </u>	<u> </u>
<u>Surrogate Recovery</u>			
Are surrogate recovery forms present?	<u> X </u>	<u> </u>	<u> </u>
Are all the samples listed on the appropriate surrogate recovery form?	<u> X </u>	<u> </u>	<u> </u>
Were surrogate recoveries outside of specified limits for any sample or blank?	<u> </u>	<u> X </u>	<u> </u>
If yes, were the samples reanalyzed?	<u> </u>	<u> X </u>	<u> </u>
<u>Matrix Spikes</u>			
Is there a matrix spike recovery form present?	<u> X </u>	<u> </u>	<u> </u>
Were matrix spikes analyzed at the required frequency?	<u> X </u>	<u> </u>	<u> </u>
How many spike recoveries were outside of QC limits?	<u> 0 </u> out of <u> 12 </u>		
How many RPDs for matrix spike and matrix spike duplicate were outside of QC limits?	<u> 0 </u> out of <u> 6 </u>		
<u>Blanks</u>			
Is a Method Blank Summary Form present?	<u> </u>	<u> X </u>	<u> </u>
Has a method blank been analyzed for each set of samples or for each 20 samples, whichever is more frequent?	<u> X </u>	<u> </u>	<u> </u>
Do any method/instrument blanks have positive results?	<u> X </u>	<u> </u>	<u> </u>
Are there field/rinse blanks associated with every sample?	<u> </u>	<u> X </u>	<u> </u>
Do any field/rinse blanks have positive results?	<u> </u>	<u> </u>	<u> X </u>
<u>Calibration and GC Performance</u>			

PCB Data Review Checklist - Page 2

	YES	NO	NA
Are the following chromatograms and data printouts present?			
Aroclor 1016	<u> X </u>	<u> </u>	<u> </u>
Aroclor 1221	<u> X </u>	<u> </u>	<u> </u>
Aroclor 1232	<u> X </u>	<u> </u>	<u> </u>
Aroclor 1242	<u> X </u>	<u> </u>	<u> </u>
Aroclor 1248	<u> X </u>	<u> </u>	<u> </u>
Aroclor 1254	<u> X </u>	<u> </u>	<u> </u>
Aroclor 1260	<u> X </u>	<u> </u>	<u> </u>
Are Initial Calibration Summary Forms present and complete for each column and analytical sequence?	<u> X </u>	<u> </u>	<u> </u>
Are the linearity criteria for the initial analyses within limits for both columns (20% RSD)	<u> X </u>	<u> </u>	<u> </u>
Have all samples been injected within a 12 hour period beginning with the injection of a calibration standard?	<u> X </u>	<u> </u>	<u> </u>
Is a Calibration Verification Summary Form present and complete for each continuing standard analyzed?	<u> X </u>	<u> </u>	<u> </u>
Are %D values for all compounds within limits (15%)?	<u> X </u>	<u> </u>	<u> </u>
<u>Analytical Sequence Check</u>			
Is a analytical sequence form present and complete for each column and each period of analyses?	<u> X </u>	<u> </u>	<u> </u>
Was the proper analytical sequence followed?	<u> X </u>	<u> </u>	<u> </u>
<u>Cleanup Efficiency Verification</u>			
Are percent recoveries of the compounds used to check the efficiency of the cleanup procedure within QC limits?	<u> X </u>	<u> </u>	<u> </u>
<u>PCB Identification</u>			
Is a sample analysis data summary sheet present for every sample?	<u> X </u>	<u> </u>	<u> </u>
Were the retention times of all quantitated peaks within the appropriate retention time windows?	<u> X </u>	<u> </u>	<u> </u>
Have all positively identified analytes been confirmed on a second column?	<u> X </u>	<u> </u>	<u> </u>
Were there any false negatives?	<u> </u>	<u> X </u>	<u> </u>
Was GC/MS confirmation provided when required?	<u> </u>	<u> </u>	<u> X </u>

PCB Data Review Checklist - Page 3

	YES	NO	NA
<u>Compound Quantitation and Reported Detection Limits</u>			
Are the reporting limits adjusted to reflect sample dilutions, and, for soils, sample moisture?	<u> X </u>	<u> </u>	<u> </u>
<u>Chromatogram Quality</u>			
Were the baselines stable?	<u> X </u>	<u> </u>	<u> </u>
Were any electronegative displacement (negative peaks) or unusual peaks detected?	<u> </u>	<u> X </u>	<u> </u>
<u>Field Duplicates</u>			
Were field duplicates submitted with the samples?	<u> X </u>	<u> </u>	<u> </u>

PCB Holding Time and Surrogate Recovery Summary

Sample ID	Holding Time	Surrogates			
		TCX-1	TCX-2	DCB-1	DCB-
K25738					
K25740					
K25741					
K25742					I
K25743				I	
K25744					
K25745					
K25746					
K25747					
K25748					
K25749					
K25750					
K25751					
K25752				I	I
K25753					
K25754					
K25755					

Surrogate Standards
 TCX Tetrachloro-m-xylene
 DCB Decachlorobiphenyl

Qualifiers:
 D Surrogates diluted out
 I Recovery high
 L Recovery low

Unless otherwise noted, all parameters are within specified limits.

PCB Calibration Summary

Instrument: GC#HP2865
 Column: RTX-5

Date:	09/02/04	09/03/04	09/03/04	09/03/04	09/03/04
Time:		11:18	11:42	16:32	17:14
	Initial Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.
	%RSD	%D	%D	%D	%D
Aroclor 1016o	k				
Aroclor 1221o	k				
Aroclor 1232o	k				
Aroclor 1242o	k		ok		
Aroclor 1248o	k	ok		ok	
Aroclor 1254o	k				ok
Aroclor 1260o	k				
Tetrachloro- m-xylene	ok				
Decachlorobip henyl	ok				
Affected Samples:					

* Single-point calibration

PCB Calibration Summary - Page 2

Instrument: GC#HP2865
 Column: RTX-5

Date:	09/02/04	09/03/04	09/03/04	
Time:		20:29	20:48	
	Initial Cal.	Cont. Cal.	Cont. Cal.	
	%RSD	%D	%D	
Aroclor 1016	ok			
Aroclor 1221	ok			
Aroclor 1232	ok			
Aroclor 1242	ok			
Aroclor 1248	ok	ok		
Aroclor 1254	ok			
Aroclor 1260	ok		ok	
Tetrachloro- m-xylene	ok			
Decachlorobip henyl	ok			
Affected Samples:				

* Single-point calibration

CORRECTED ANALYSIS SUMMARY FORMS

TOTAL ORGANIC CARBON

Introduction

Analyses were performed according to the following method:

Total Organic Carbon

EPA SW-846 Lyod Khan

The data review process is intended to evaluate data on a technical basis. It is assumed that the data package represents the best efforts of the laboratory and has already been subjected to adequate quality review prior to submission for review.

During the review process, laboratory data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, modified or deleted by the data reviewer. Results are qualified with the following codes in accordance with the National Functional Guidelines.

- U The material was analyzed for, but was not detected. The associated value is either the sample quantitation limit or the sample detection limit depending on the method.
- J The associated value is an estimated quantity.
- UJ The material was analyzed for, but was not detected. The associated value is approximate and may or may not represent the actual limit of quantitation/detection.
- R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant QC problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Times

The method specified holding time is 14 days from sample collection to analysis the QAPP specific holding time is 28 days.

All samples were analyzed with the 28 day holding time.

2. Calibration

All initial and continuing calibration data were acceptable.

3. Blank Contamination

No method blank contamination was reported.

4. Matrix Spike/Matrix Spike Duplicate

Matrix spike and matrix spike duplicate data are used to assess the precision and accuracy of the analytical method.

The MS/MSD recoveries were within control limits.

5. Laboratory Control Sample (LCS)

The LCS associated with analytical batch **** was outside of control limits less than the control limit. Sample results associated with this analytical batch have been qualified as estimated. All other LCS recoveries were within control limits.

6. Field Duplicate

Results for field duplicate samples are summarized as follows:

Sample ID / Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
K25747/K25748	TOC	5520	24300	125%
K25741/K25742	TOC	9730	10100	3.7%

The RPD between sample locations K25747 and K25748 outside of the acceptable limit and have been qualified as estimated. The field duplicate results are acceptable.

7. Overall Assessment

Other than for those deviations noted in this review, the analysis of the samples was in conformance with method specifications.

DATA REVIEW CHECKLIST

Supplemental Data Review Checklist

	YES	NO	NA
<u>Data Completeness</u>			
Is there a narrative or cover letter present?	X		
Are the sample numbers included in the narrative?		X	
Are the methods utilized notated?	X		
Are the sample chain-of-custodies present?	X		
Do the chain-of-custodies indicate any problems with sample receipt or sample condition?		X	
<u>Holding Times</u>			
Have any holding times been exceeded?	X		
<u>Matrix Spike/Matrix Spike Duplicates</u>			
Were matrix spikes analyzed and were the results within acceptable limits?	X		
<u>Laboratory Control Samples</u>			
Were LCS analyzed and were recoveries within acceptable limits?		X	
<u>Blanks</u>			
Has a method blank been analyzed for each set of samples or for each 20 samples?	X		
Do any have results above the reporting limit?		X	
Do any trip/field/rinse blanks have positive results?			X
<u>Calibration</u>			
Was the calibration acceptable?	X		
<u>Raw Data</u>			
Is raw data present and complete for all samples and QC?	X		
<u>Compound Quantitation and Reported Limits</u>			
Are the reporting limits adjusted to reflect sample dilutions, and for soils, sample moisture?	X		

TOTAL ORGANIC CARBON RESULTS

SUPPORTING DOCUMENTATION

DATA REVIEW FOR
ALLIED PAPER, INC./PORTAGE CREEK/KALAMAZOO RIVER
SUPERFUND SITE

SDG# KAL394

PCB AND
TOC ANALYSES

FORMER HAWTHORN MILL

Analyses performed by:

Severn Trent Laboratories
Colchester, Vermont

Review performed by:



Blasland, Bouck & Lee, Inc.
Syracuse, New York

Summary

The following is an assessment of the data package for SDG# KAL394 for sediment sampling at the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site. Included with this assessment are the data review check sheets used in the review of the package and the corrected sample analysis data summary sheets. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Date	Analyses					
				VOA	BNA	PCB	TAL	TOC	MISC
K25756	583830	soil	08/17/04			x		x	
K25757	583831	soil	08/17/04			x		x	
K25758	583832	soil	08/17/04			x		x	
K25759	583833	soil	08/17/04			x		x	
K25760 ¹	583834	soil	08/17/04			x		x	
K25761	583835	soil	08/17/04			x		x	
K25762	583836	soil	08/17/04			x		x	
K25763	583837	soil	08/17/04			x		x	
K25764	583838	soil	08/17/04			x		x	
K25765	583839	soil	08/17/04			x		x	
K25766	583840	soil	08/17/04			x		x	
K25767	583841	soil	08/17/04			x		x	
K25768	583842	soil	08/26/04			x		x	
K25769	583843	soil	08/26/04			x		x	
K25770	583844	soil	08/26/04			x		x	
K25771 ¹	583845	soil	08/26/04			x		x	
K25717	584009	soil	08/18/04			x		x	
K25718	584010	soil	08/18/04			x		x	

1 MS/MSD analysis performed on sample

PCB ANALYSES

Introduction

Analyses were performed according to the USEPA SW-846 method 8082.

The data review process is intended to evaluate the data on a technical basis. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with National Functional Guidelines:

- U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
- J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
- B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.
- JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.
- P The difference in the quantitated results for the two columns was greater than 25%. The reported value may be biased.
- E The compound was quantitated above d.
- D Concentration is based on a diluted sample analysis.
- UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
- R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant QC problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Time

The QAPP-specified holding time for PCB analyses of soil samples are 10 days from sample receipt to extraction and 40 days to analysis. The technical holding times are 14 days from sample collection to extraction and 40 days from extraction to analysis.

All samples were analyzed within the technical holding time.

2. Blank Contamination

Quality assurance blanks, i.e., method, field or rinse blanks, are prepared to identify any contamination which may have been introduced in to the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Field and rinse blanks measure contamination of samples during field operations.

No Aroclors were detected in the method blanks.

3. System Performance

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method allows a maximum RSD of 20%.

All initial calibrations were within the specified limit.

2 Continuing Calibration

A maximum %D of 15 is allowed.

All continuing calibration standards were within the specified limit.

5. Surrogates / System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique.

Recoveries for one surrogate on one column and two surrogates on the second column were outside control limits for sample K25756. Since data was reported for the first column, no data have been qualified based on the deviations. Recoveries for one surrogate were above control limits in samples K25760, K25761, K25762 and K25765. Since recoveries for the remaining surrogate were within control limits, no data have been qualified based on the deviations. Surrogates were diluted in samples K25760MS, K25760MSD, K25769, K25770, K25771, K25771MS, K25771MSD and K25718. No data have been qualified based on the diluted surrogates.

6. Compound Identification

The retention times of all quantitated peaks must fall within the calculated retention time windows for both the primary and confirmation columns.

All quantitated peaks fell within the appropriate retention time windows.

7. Matrix Spike/Matrix Spike Duplicate/Matrix Spike Blank

Matrix spike and matrix spike duplicate data are used to assess the precision and accuracy of the analytical method.

All matrix spike and matrix spike duplicate recoveries and relative percent differences between recoveries were within control limits. All matrix spike blank recoveries were also within control limits.

8. Field Duplicates

Results for field duplicate samples are summarized as follows:

Sample ID/ Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD*
K25766 / K25767	Aroclor 1242	ND	85J	NA
	Aroclor 1254	410	410	0.0%
	Aroclor 1260	96J	89J	<CRDL
K25758 / K25759	Aroclor 1260	84J	ND	NA
K25769 / K25770	Aroclor 1254	1600	1400	13.3%
	Aroclor 1260	310	220J	33.9%

* RPD based on total PCB content.

ND Not detected.

NA Analyte not detected in sample and/or duplicate. RPD not applicable.

The field duplicate results are acceptable.

9. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines listed in the analytical method.

DATA REVIEW CHECKLIST

PCB Data Review Checklist

	YES	NO	NA
<u>Data Completeness and Deliverables</u>			
Is there a narrative or cover letter present?	<u>X</u>	<u> </u>	<u> </u>
Are the sample numbers included in the narrative?	<u>X</u>	<u> </u>	<u> </u>
Are the sample chain-of-custodies present?	<u>X</u>	<u> </u>	<u> </u>
Do the chain-of-custodies indicate any problems with sample receipt or sample condition?	<u> </u>	<u>X</u>	<u> </u>
<u>Holding Times</u>			
Have any holding times been exceeded?	<u> </u>	<u>X</u>	<u> </u>
<u>Surrogate Recovery</u>			
Are surrogate recovery forms present?	<u>X</u>	<u> </u>	<u> </u>
Are all the samples listed on the appropriate surrogate recovery form?	<u>X</u>	<u> </u>	<u> </u>
Were surrogate recoveries outside of specified limits for any sample or blank?	<u>X</u>	<u> </u>	<u> </u>
If yes, were the samples reanalyzed?	<u> </u>	<u>X</u>	<u> </u>
<u>Matrix Spikes</u>			
Is there a matrix spike recovery form present?	<u>X</u>	<u> </u>	<u> </u>
Were matrix spikes analyzed at the required frequency?	<u>X</u>	<u> </u>	<u> </u>
How many spike recoveries were outside of QC limits?			
<u> 0 </u> out of <u> 8 </u>			
How many RPDs for matrix spike and matrix spike duplicate were outside of QC limits?			
<u> 0 </u> out of <u> 4 </u>			
<u>Blanks</u>			
Is a Method Blank Summary Form present?	<u>X</u>	<u> </u>	<u> </u>
Has a method blank been analyzed for each set of samples or for each 20 samples, whichever is more frequent?	<u>X</u>	<u> </u>	<u> </u>
Do any method/instrument blanks have positive results?	<u> </u>	<u>X</u>	<u> </u>
Are there field/rinse blanks associated with every sample?	<u> </u>	<u>X</u>	<u> </u>
Do any field/rinse blanks have positive results?	<u> </u>	<u> </u>	<u>X</u>
<u>Calibration and GC Performance</u>			
Are the following chromatograms and data printouts present?			
Aroclor 1016	<u>X</u>	<u> </u>	<u> </u>
Aroclor 1221	<u>X</u>	<u> </u>	<u> </u>
Aroclor 1232	<u>X</u>	<u> </u>	<u> </u>

PCB Data Review Checklist - Page 2

	YES	NO	NA
Aroclor 1242	<u>X</u>	<u> </u>	<u> </u>
Aroclor 1248	<u>X</u>	<u> </u>	<u> </u>
Aroclor 1254	<u>X</u>	<u> </u>	<u> </u>
Aroclor 1260	<u>X</u>	<u> </u>	<u> </u>
Are Initial Calibration Summary Forms present and complete for each column and analytical sequence?	<u>X</u>	<u> </u>	<u> </u>
Are the linearity criteria for the initial analyses within limits for both columns (20% RSD)	<u>X</u>	<u> </u>	<u> </u>
Have all samples been injected within a 12 hour period beginning with the injection of a calibration standard?	<u>X</u>	<u> </u>	<u> </u>
Is a Calibration Verification Summary Form present and complete for each continuing standard analyzed?	<u>X</u>	<u> </u>	<u> </u>
Are %D values for all compounds within limits (15%)?	<u>X</u>	<u> </u>	<u> </u>
<u>Analytical Sequence Check</u>			
Is a analytical sequence form present and complete for each column and each period of analyses?	<u>X</u>	<u> </u>	<u> </u>
Was the proper analytical sequence followed?	<u>X</u>	<u> </u>	<u> </u>
<u>Cleanup Efficiency Verification</u>			
Are percent recoveries of the compounds used to check the efficiency of the cleanup procedure within QC limits?	<u>X</u>	<u> </u>	<u> </u>
<u>PCB Identification</u>			
Is a sample analysis data summary sheet present for every sample?	<u>X</u>	<u> </u>	<u> </u>
Were the retention times of all quantitated peaks within the appropriate retention time windows?	<u>X</u>	<u> </u>	<u> </u>
Have all positively identified analytes been confirmed on a second column?	<u>X</u>	<u> </u>	<u> </u>
Were there any false negatives?	<u> </u>	<u>X</u>	<u> </u>
Was GC/MS confirmation provided when required?	<u> </u>	<u> </u>	<u>X</u>
<u>Compound Quantitation and Reported Detection Limits</u>			
Are the reporting limits adjusted to reflect sample dilutions, and, for soils, sample moisture?	<u>X</u>	<u> </u>	<u> </u>
<u>Chromatogram Quality</u>			
Were the baselines stable?	<u>X</u>	<u> </u>	<u> </u>
Were any electronegative displacement (negative peaks) or unusual peaks detected?	<u> </u>	<u>X</u>	<u> </u>

PCB Data Review Checklist - Page 3

YES NO NA

Field Duplicates

Were field duplicates submitted with the samples?

 X

PCB Holding Time and Surrogate Recovery Summary

Sample ID	Holding Time	Surrogates			
		TCX-1	TCX-2	DCB-1	DCB-2
K25756			1	1	1
K25757					
K25758					
K25759					
K25760				1	1
K25760 MS		D	D	D	D
K25760 MSD		D	D	D	D
K25761				1	1
K25762				1	
K25763					
K25764					
K25765					1
K25766					
K25767					
K25768					
K25769		D	D	D	D
K25770		D	D	D	D
K25771		D	D	D	D
K25771 MS		D	D	D	D
K25771 MSD		D	D	D	D
K25717					
K25718		D	D	D	D

Surrogate Standards
 TCX Tetrachloro-m-xylene
 DCB Decachlorobiphenyl

Qualifiers:
 D Surrogates diluted out
 1 Recovery high
 1 Recovery low

Unless otherwise noted, all parameters are within specified limits.

Instrument: HP2865
Column: RTX-5/RTX-35

[illegible]

PCB Calibration Summary - Page 2

Instrument: HP2865
 Column: RTX-5/RTX-35

Date:	09/08/04							
Time:	1033							
	Cont. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.
	%D	%D	%D	%D	%D	%D	%D	%D
Aroclor 1016								
Aroclor 1221								
Aroclor 1232								
Aroclor 1242	ok							
Aroclor 1248								
Aroclor 1254								
Aroclor 1260								
Tetrachloro-m-xylene								
Decachlorobiphenyl								
Affected Samples:								

Corrected Sample Analysis Summary Forms

0000

0001

0002

0003

0004

0005

TOTAL ORGANIC CARBON

0006

0007

0008

0009

0010

0011

0012

0013

0014

0015

0016

0017

0018

0019

Introduction

Analyses were performed according to the following method:

Total Organic Carbon Lloyd Kahn

The data review process is intended to evaluate data on a technical basis. It is assumed that the data package represents the best efforts of the laboratory and has already been subjected to adequate quality review prior to submission for review.

During the review process, laboratory data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, modified or deleted by the data reviewer. Results are qualified with the following codes in accordance with the National Functional Guidelines.

- U The material was analyzed for, but was not detected. The associated value is either the sample quantitation limit or the sample detection limit depending on the method.
- J The associated value is an estimated quantity.
- UJ The material was analyzed for, but was not detected. The associated value is approximate and may or may not represent the actual limit of quantitation/detection.
- R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant QC problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Times

The method specified holding time is 14 days from sample collection to extraction and 40 days from extraction to analysis.

2. Calibration

All initial and continuing calibration data were acceptable.

3. Blank Contamination

TOC was detected in one method blank. Since all samples were at a concentration greater than the blank action level, no data have been qualified based on the blank content.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

Matrix spike and matrix spike duplicate data are used to assess the precision and accuracy of the analytical method.

The MS/MSD recoveries were within control limits.

5. Laboratory Control Sample (LCS)

The LCS recovery was below control limits in one set. Based on the deviations, data have been qualified as estimated for TOC in samples K25756, K25757, K25758, K25759, K25760, K25761, K25762, K25763, K25764, K25765, K25766, K25767, K25768, K25769, K25770 and K25771.

6. Field Duplicate

Results for field duplicate samples are summarized as follows:

Sample ID / Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
K25766 / K25767	TOC	139100	89200	43.7%
K25758 / K25759	TOC	100200	101700	1.5%
K25769 / K25770	TOC	88300	105700	17.9%

The field duplicate results are acceptable.

7. Overall Assessment

Other than for those deviations noted in this review, the analysis of the samples was in conformance with method specifications.

0000

0000

0000

0000

0000

0000

DATA REVIEW CHECKLIST

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

Supplemental Data Review Checklist

	YES	NO	NA
<u>Data Completeness</u>			
Is there a narrative or cover letter present?	<u> X </u>	<u> </u>	<u> </u>
Are the sample numbers included in the narrative?	<u> X </u>	<u> </u>	<u> </u>
Are the methods utilized notated?	<u> X </u>	<u> </u>	<u> </u>
Are the sample chain-of-custodies present?	<u> X </u>	<u> </u>	<u> </u>
Do the chain-of-custodies indicate any problems with sample receipt or sample condition?	<u> </u>	<u> X </u>	<u> </u>
<u>Holding Times</u>			
Have any holding times been exceeded?	<u> </u>	<u> X </u>	<u> </u>
<u>Matrix Spike/Matrix Spike Duplicates</u>			
Were matrix spikes analyzed and were the results within acceptable limits?	<u> X </u>	<u> </u>	<u> </u>
<u>Laboratory Control Samples</u>			
Were LCS analyzed and were recoveries within acceptable limits?	<u> </u>	<u> X </u>	<u> </u>
<u>Blanks</u>			
Has a method blank been analyzed for each set of samples or for each 20 samples?	<u> X </u>	<u> </u>	<u> </u>
Do any have results above the reporting limit?	<u> X </u>	<u> </u>	<u> </u>
Do any trip/field/rinse blanks have positive results?	<u> </u>	<u> </u>	<u> X </u>
<u>Calibration</u>			
Was the calibration acceptable?	<u> X </u>	<u> </u>	<u> </u>
<u>Raw Data</u>			
Is raw data present and complete for all samples and QC?	<u> X </u>	<u> </u>	<u> </u>
<u>Compound Quantitation and Reported Limits</u>			
Are the reporting limits adjusted to reflect sample dilutions, and for soils, sample moisture?	<u> X </u>	<u> </u>	<u> </u>

Corrected Sample Analysis Summary Forms

SUPPORTING DOCUMENTATION

DATA REVIEW FOR
ALLIED PAPER, INC./PORTAGE CREEK/KALAMAZOO RIVER
SUPERFUND SITE

SDG# KAL395

PCB AND
TOC ANALYSES

FORMER HAWTHORN MILL

Analyses performed by:

Severn Trent Laboratories
Colchester, Vermont

Review performed by:



Blasland, Bouck & Lee, Inc.
Syracuse, New York

Summary

The following is an assessment of the data package for SDG# KAL395 for soil sampling at the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site. Included with this assessment are the data review check sheets used in the review of the package and the corrected sample analysis data summary sheets. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Date	Analyses					
				VOA	BNA	PCB	TAL	TOC	MISC
K25719	584011	soil	08/18/04			x		x	
K25720	584012	soil	08/18/04			x		x	
K25721	584013	soil	08/17/04			x		x	
K25722	584014	soil	08/18/04			x		x	
K25723	584015	soil	08/18/04			x		x	
K25724	584016	soil	08/18/04			x		x	
K25725	584017	soil	08/18/04			x		x	
K25726	584018	soil	08/18/04			x		x	
K25727 ¹	584019	soil	08/18/04			x		x	
K25728	584020	soil	08/18/04			x		x	
K25729	584021	soil	08/18/04			x		x	
K25730	584022	soil	08/18/04			x		x	
K25731	584023	soil	08/18/04			x		x	
K25732	584024	soil	08/18/04			x		x	
K25733	584025	soil	08/18/04			x		x	
K25734	584026	soil	08/17/04			x		x	
K25735	584027	soil	08/17/04			x		x	
K25736	584028	soil	08/17/04			x		x	
K25737	584029	soil	08/18/04			x		x	
K25739	584030	soil	08/17/04			x		x	

1 MS/MSD analysis performed on sample

PCB ANALYSES

Introduction

Analyses were performed according to the USEPA SW-846 method 8082.

The data review process is intended to evaluate the data on a technical basis. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with National Functional Guidelines:

- U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
- J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
- B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.
- JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.
- P The difference in the quantitated results for the two columns was greater than 25%. The reported value may be biased.
- E The compound was quantitated above d.
- D Concentration is based on a diluted sample analysis.
- UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
- R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant QC problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Time

The QAPP-specified holding time for PCB analyses of soil samples are 10 days from sample receipt to extraction and 40 days to analysis. The technical holding times are 14 days from sample collection to extraction and 40 days from extraction to analysis.

All samples were analyzed within the technical holding time.

2. Blank Contamination

Quality assurance blanks, i.e., method, field or rinse blanks, are prepared to identify any contamination which may have been introduced in to the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Field and rinse blanks measure contamination of samples during field operations.

No Aroclors were detected in the method blanks.

3. System Performance

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method allows a maximum RSD of 20%.

All initial calibrations were within the specified limit.

2 Continuing Calibration

A maximum %D of 15 is allowed.

All continuing calibration standards were within the specified limit.

5. Surrogates / System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique.

Recovery for one surrogate was outside control limits for sample K25731. Since recovery for the remaining surrogate was within control limits, no data have been qualified based on the deviation. Surrogates were diluted in sample K25727MS and MSD. No data have been qualified based on the diluted surrogates.

6. Compound Identification

The retention times of all quantitated peaks must fall within the calculated retention time windows for both the primary and confirmation columns.

All quantitated peaks fell within the appropriate retention time windows.

7. Matrix Spike/Matrix Spike Duplicate/Matrix Spike Blank

Matrix spike and matrix spike duplicate data are used to assess the precision and accuracy of the analytical method.

All matrix spike and matrix spike duplicate recoveries and relative percent differences between recoveries were within control limits. All matrix spike blank recoveries were also within control limits.

8. Field Duplicates

Results for field duplicate samples are summarized as follows:

Sample ID/ Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD*
K25730 / K25731	Aroclor 1254	340	230	38.5%

* RPD based on total PCB content.

ND Not detected.

NA Analyte not detected in sample and/or duplicate. RPD not applicable.

The field duplicate results are acceptable.

9. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines listed in the analytical method.

DATA REVIEW CHECKLIST

PCB Data Review Checklist

	YES	NO	NA
<u>Data Completeness and Deliverables</u>			
Is there a narrative or cover letter present?	<u>X</u>	<u> </u>	<u> </u>
Are the sample numbers included in the narrative?	<u>X</u>	<u> </u>	<u> </u>
Are the sample chain-of-custodies present?	<u>X</u>	<u> </u>	<u> </u>
Do the chain-of-custodies indicate any problems with sample receipt or sample condition?	<u> </u>	<u>X</u>	<u> </u>
<u>Holding Times</u>			
Have any holding times been exceeded?	<u> </u>	<u>X</u>	<u> </u>
<u>Surrogate Recovery</u>			
Are surrogate recovery forms present?	<u>X</u>	<u> </u>	<u> </u>
Are all the samples listed on the appropriate surrogate recovery form?	<u>X</u>	<u> </u>	<u> </u>
Were surrogate recoveries outside of specified limits for any sample or blank?	<u>X</u>	<u> </u>	<u> </u>
If yes, were the samples reanalyzed?	<u> </u>	<u>X</u>	<u> </u>
<u>Matrix Spikes</u>			
Is there a matrix spike recovery form present?	<u>X</u>	<u> </u>	<u> </u>
Were matrix spikes analyzed at the required frequency?	<u>X</u>	<u> </u>	<u> </u>
How many spike recoveries were outside of QC limits?			
<u> 0 </u> out of <u> 4 </u>			
How many RPDs for matrix spike and matrix spike duplicate were outside of QC limits?			
<u> 0 </u> out of <u> 2 </u>			
<u>Blanks</u>			
Is a Method Blank Summary Form present?	<u>X</u>	<u> </u>	<u> </u>
Has a method blank been analyzed for each set of samples or for each 20 samples, whichever is more frequent?	<u>X</u>	<u> </u>	<u> </u>
Do any method/instrument blanks have positive results?	<u> </u>	<u>X</u>	<u> </u>
Are there field/rinse blanks associated with every sample?	<u> </u>	<u>X</u>	<u> </u>
Do any field/rinse blanks have positive results?	<u> </u>	<u> </u>	<u>X</u>
<u>Calibration and GC Performance</u>			
Are the following chromatograms and data printouts present?			
Aroclor 1016	<u>X</u>	<u> </u>	<u> </u>
Aroclor 1221	<u>X</u>	<u> </u>	<u> </u>
Aroclor 1232	<u>X</u>	<u> </u>	<u> </u>

PCB Data Review Checklist - Page 2

	YES	NO	NA
Aroclor 1242	<u>X</u>	<u> </u>	<u> </u>
Aroclor 1248	<u>X</u>	<u> </u>	<u> </u>
Aroclor 1254	<u>X</u>	<u> </u>	<u> </u>
Aroclor 1260	<u>X</u>	<u> </u>	<u> </u>
Are Initial Calibration Summary Forms present and complete for each column and analytical sequence?	<u>X</u>	<u> </u>	<u> </u>
Are the linearity criteria for the initial analyses within limits for both columns (20% RSD)	<u>X</u>	<u> </u>	<u> </u>
Have all samples been injected within a 12 hour period beginning with the injection of a calibration standard?	<u>X</u>	<u> </u>	<u> </u>
Is a Calibration Verification Summary Form present and complete for each continuing standard analyzed?	<u>X</u>	<u> </u>	<u> </u>
Are %D values for all compounds within limits (15%)?	<u>X</u>	<u> </u>	<u> </u>
<u>Analytical Sequence Check</u>			
Is a analytical sequence form present and complete for each column and each period of analyses?	<u>X</u>	<u> </u>	<u> </u>
Was the proper analytical sequence followed?	<u>X</u>	<u> </u>	<u> </u>
<u>Cleanup Efficiency Verification</u>			
Are percent recoveries of the compounds used to check the efficiency of the cleanup procedure within QC limits?	<u>X</u>	<u> </u>	<u> </u>
<u>PCB Identification</u>			
Is a sample analysis data summary sheet present for every sample?	<u>X</u>	<u> </u>	<u> </u>
Were the retention times of all quantitated peaks within the appropriate retention time windows?	<u>X</u>	<u> </u>	<u> </u>
Have all positively identified analytes been confirmed on a second column?	<u>X</u>	<u> </u>	<u> </u>
Were there any false negatives?	<u> </u>	<u>X</u>	<u> </u>
Was GC/MS confirmation provided when required?	<u> </u>	<u> </u>	<u>X</u>
<u>Compound Quantitation and Reported Detection Limits</u>			
Are the reporting limits adjusted to reflect sample dilutions, and, for soils, sample moisture?	<u>X</u>	<u> </u>	<u> </u>
<u>Chromatogram Quality</u>			
Were the baselines stable?	<u>X</u>	<u> </u>	<u> </u>
Were any electronegative displacement (negative peaks) or unusual peaks detected?	<u> </u>	<u>X</u>	<u> </u>

PCB Data Review Checklist - Page 3

	YES	NO	NA
<u>Field Duplicates</u>			
Were field duplicates submitted with the samples?	<u> X </u>	<u> </u>	<u> </u>

PCB Holding Time and Surrogate Recovery Summary

Sample ID	Holding Time	Surrogates			
		TCX-1	TCX-2	DCB-1	DCB-2
K25719					
K25720					
K25721					
K25722					
K25723					
K25724					
K25725					
K25726					
K25727					
K25727 MS		D	D	D	D
K25727 MSD		D	D	D	D
K25728					
K25729					
K25730					
K25731		I			
K25732					
K25733					
K25734					
K25735					
K25736					
K25737					
K25739					

Surrogate Standards
 TCX Tetrachloro-m-xylene
 DCB Decachlorobiphenyl

Qualifiers:
 D Surrogates diluted out
 I Recovery high
 I Recovery low

Unless otherwise noted, all parameters are within specified limits.

Instrument: HP2865
Column: RTX-5/RTX-35

ka1395

Corrected Sample Analysis Summary Forms

0448

0448

0448

0448

0448

0448

0448

0448

0448

0448

0448

0448

0448

0448

0448

0448

0448

0448

0448

TOTAL ORGANIC CARBON

Introduction

Analyses were performed according to the following method:

Total Organic Carbon Lloyd Kahn

The data review process is intended to evaluate data on a technical basis. It is assumed that the data package represents the best efforts of the laboratory and has already been subjected to adequate quality review prior to submission for review.

During the review process, laboratory data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, modified or deleted by the data reviewer. Results are qualified with the following codes in accordance with the National Functional Guidelines.

- U The material was analyzed for, but was not detected. The associated value is either the sample quantitation limit or the sample detection limit depending on the method.
- J The associated value is an estimated quantity.
- UJ The material was analyzed for, but was not detected. The associated value is approximate and may or may not represent the actual limit of quantitation/detection.
- R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant QC problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Times

The method specified holding time is 14 days from sample collection to extraction and 40 days from extraction to analysis.

2. Calibration

All initial and continuing calibration data were acceptable.

3. Blank Contamination

No TOC was detected in the method blanks.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

Matrix spike and matrix spike duplicate data are used to assess the precision and accuracy of the analytical method.

The MS/MSD recoveries were within control limits.

5. Laboratory Control Sample (LCS)

The LCS recoveries were within control limits.

6. Field Duplicate

Results for field duplicate samples are summarized as follows:

Sample ID / Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
K25730 / K25731	TOC	207900	190100	8.9%

The field duplicate results are acceptable.

7. Overall Assessment

Other than for those deviations noted in this review, the analysis of the samples was in conformance with method specifications.

00000

00000

00000

00000

00000

00000

DATA REVIEW CHECKLIST

00000

00000

00000

00000

00000

00000

00000

00000

00000

00000

00000

00000

00000

Supplemental Data Review Checklist

	YES	NO	NA
<u>Data Completeness</u>			
Is there a narrative or cover letter present?	<u> X </u>	<u> </u>	<u> </u>
Are the sample numbers included in the narrative?	<u> X </u>	<u> </u>	<u> </u>
Are the methods utilized notated?	<u> X </u>	<u> </u>	<u> </u>
Are the sample chain-of-custodies present?	<u> X </u>	<u> </u>	<u> </u>
Do the chain-of-custodies indicate any problems with sample receipt or sample condition?	<u> </u>	<u> X </u>	<u> </u>
<u>Holding Times</u>			
Have any holding times been exceeded?	<u> </u>	<u> X </u>	<u> </u>
<u>Matrix Spike/Matrix Spike Duplicates</u>			
Were matrix spikes analyzed and were the results within acceptable limits?	<u> X </u>	<u> </u>	<u> </u>
<u>Laboratory Control Samples</u>			
Were LCS analyzed and were recoveries within acceptable limits?	<u> X </u>	<u> </u>	<u> </u>
<u>Blanks</u>			
Has a method blank been analyzed for each set of samples or for each 20 samples?	<u> X </u>	<u> </u>	<u> </u>
Do any have results above the reporting limit?	<u> </u>	<u> X </u>	<u> </u>
Do any trip/field/rinse blanks have positive results?	<u> </u>	<u> </u>	<u> X </u>
<u>Calibration</u>			
Was the calibration acceptable?	<u> X </u>	<u> </u>	<u> </u>
<u>Raw Data</u>			
Is raw data present and complete for all samples and QC?	<u> X </u>	<u> </u>	<u> </u>
<u>Compound Quantitation and Reported Limits</u>			
Are the reporting limits adjusted to reflect sample dilutions, and for soils, sample moisture?	<u> X </u>	<u> </u>	<u> </u>

Corrected Sample Analysis Summary Forms

SUPPORTING DOCUMENTATION


Appendix C


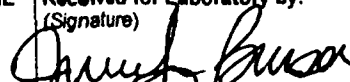
BBL®

BLASLAND, BOUCK & LEE, INC.
engineers, scientists, economists

6723 Towpath Road, P.O. Box 66
Syracuse, New York 13214-0066
TEL: (315) 446-9120

CHAIN OF CUSTODY RECORD

PROJ. NO. 64585		PROJECT NAME FORMER HAWTHORNE MILL OXBOW				<div style="text-align: center;"> <p>Results to Mike Scoville</p> </div>											
SAMPLERS: (Signature) 																	
STA NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	Number of Containers	PCB	TOL									REMARKS
	8/26/04	1107			KZ5701	1	X	X									
	8/26/04	1107			KZ5702	1	X	X									
	8/26/04	1107			KZ5703	1	X	X									
	8/26/04	1126			KZ5704	1	X	X									
	8/26/04	1126			KZ5705	1	X	X									
	8/26/04	1126			KZ5706	1	X	X									
	8/26/04	1245			KZ5707	1	X	X									
	8/26/04	1245			KZ5708	1	X	X									
	8/26/04	1245			KZ5709	1	X	X									
	8/26/04	1421			KZ5710	1	X	X									
	8/26/04	1421			KZ5711	1	X	X									
	8/26/04	1421			KZ5712	1	X	X									
	8/26/04	1002			KZ5713	1	X	X									
	8/26/04	1012			KZ5714	1	X	X									

Relinquished by: (Signature) 	DATE 8/26/04	TIME 1600	Received by: (Signature)	Relinquished by: (Signature)	DATE	TIME	Relinquished by: (Signature)
Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)	Relinquished by: (Signature)	DATE	TIME	Relinquished by: (Signature)
Relinquished by: (Signature)	DATE	TIME	Received for Laboratory by: (Signature) 	DATE 8.27.04	TIME 0930	Remarks:	

6723 Towpath Road, P.O. Box 66
Syracuse, New York 13214-0066
TEL: (315) 446-9120

CHAIN OF CUSTODY RECORD

PROJ. NO.		PROJECT NAME		STATION LOCATION		REMARKS	
SAMPLERS: (Signature)							
STA. NO.	DATE	TIME	COMP.	GRAB	RECEIVED	TOX	
	8/20/04	1012			1	X	X
	8/20/04	1012	1245		2	X	X
	8/20/04	1012			1	X	X
	8/20/04	1012			2	X	X
	8/18/04	1000			1	X	X
	8/14/04	0820			1	X	X
	8/19/04	0820			1	X	X
	8/18/04	0820			1	X	X
	8/17/04	1540			1	X	X
	8/18/04	1034			1	X	X
	8/17/04	0820			1	X	X
	8/18/04	1000			1	X	X
	8/18/04	0805			1	X	X
	8/18/04	1630			1	X	X

Results to
Mike Scoville

received 8.27.04 0930
Judy Busa

received 8.30.04 1000
Judy Busa

Relinquished by: (Signature)
 Relinquished by: (Signature)
 Relinquished by: (Signature)

DATE
8/20/04
 TIME
1000

Received by: (Signature)
 Received by: (Signature)
 Received for Laboratory by: (Signature)

Relinquished by: (Signature)
 Relinquished by: (Signature)

DATE
 TIME
 Relinquished by: (Signature)

DATE
 TIME

Remarks:

Judy Busa

8.27.04

0930

6723 Towpath Road, P.O. Box 66
Syracuse, New York 13214-0066
TEL: (315) 446-9120

CHAIN OF CUSTODY RECORD

PROJ. NO.		PROJECT NAME															
64585		FORMER HANTHORNE Mill Oxbow															
SAMPLERS: (Signature)																	
STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	PCB	TOC							REMARKS			
	8/18/04	0900			K25727	1	X	X							<p>Results to Mike Scoville</p> <p>received 8.30.04 1000 Judy Buser</p> <p>received 8.27.04 0930 Judy Buser</p> <p>received 8.30.04 1000 Judy Buser</p>		
	8/18/04	0900			K25727 (MS/MSD)	2	X	X									
	8/18/04	0900			K25728	1	X	X									
	8/18/04	0900			K25729	1	X	X									
	8/18/04	1030			K25730	1	X	X									
	8/18/04				K25731	1	X	X									
	8/18/04	0935			K25732	1	X	X									
	8/18/04	0905			K25733	1	X	X									
	8/17/04	1700			K25734	1	X	X									
	8/17/04	1810			K25735	1	X	X									
	8/17/04	1810			K25736	1	X	X									
	8/18/04	1445			K25737	1	X	X									
	8/17/04	1700			K25738	1	X	X									
	8/17/04	1700			K25739	1	X	X									
Relinquished by: (Signature)				DATE	TIME	Received by: (Signature)				Relinquished by: (Signature)				DATE		TIME	Relinquished by: (Signature)
				8/20/04	1600												
Relinquished by: (Signature)				DATE	TIME	Received by: (Signature)				Relinquished by: (Signature)				DATE	TIME	Relinquished by: (Signature)	
Relinquished by: (Signature)				DATE	TIME	Received for Laboratory by: (Signature)				DATE	TIME	Remarks:					
						Judy Buser				8.27.04	0930						



COPY - ORIGINAL ON FILE
SDG # KAL392 ETR # 102037

10/23/95
5951188L.CDR

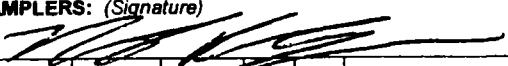
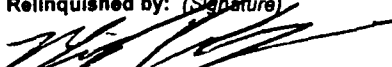

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

6723 Towpath Road, P.O. Box 66
Syracuse, New York 13214-0066
TEL: (315) 446-9120

COPY - ORIGINAL ON FILE

SDG # KAL393 ETR # 102039

CHAIN OF CUSTODY RECORD

PROJ. NO.		PROJECT NAME																					
64585		FORMER HANTHORNE MILL OXBOW																					
SAMPLERS: (Signature) 																							
STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION																REMARKS		
	8/18/04	0900			K25727																Results to Mike Scoville		
	8/18/04	0900			K25727 (MS/MSD)																		
	8/18/04	0900			K25728																		
	8/18/04	0900			K25729																		
	8/18/04	1030			K25730																		
	8/18/04				K25731																		
	8/18/04	0935			K25732																		
	8/18/04	0805			K25733																		
	8/17/04	1700			K25734																		
	8/17/04	1810			K25735																		
	8/17/04	1410			K25736																		
	8/18/04	1445			K25737																		
	8/17/04	1700			K25738																		
	8/17/04	1700			K25739																		
Relinquished by: (Signature) 					DATE	TIME	Received by: (Signature)					Relinquished by: (Signature)					DATE	TIME	Relinquished by: (Signature)				
Relinquished by: (Signature)					DATE	TIME	Received by: (Signature)					Relinquished by: (Signature)					DATE	TIME	Relinquished by: (Signature)				
Relinquished by: (Signature)					DATE	TIME	Received for Laboratory by: (Signature)					DATE		TIME		Remarks:							
												8.27.04		0930									

6723 Towpath Road, P.O. Box 66
Syracuse, New York 13214-0066
TEL: (315) 446-9120

CHAIN OF CUSTODY RECORD

PROJ. NO.		PROJECT NAME													
64585		FORMER HAWTHORNE MALL OXBOW													
SAMPLERS: (Signature)															
STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	PCB	TOC							REMARKS	
	8/17/04	1810			K25740	X	X								RESULTS TO: MIKE SCOVILLE
	8/17/04	1810			K25740 (ms/msd)	X	X								
	8/17/04	1700			K25741	X	X								
	8/17/04	—			K25742	X	X								
	8/17/04	1605			K25743	X	X								
	8/17/04	1605			K25744	X	X								
	8/17/04	1605			K25745	X	X								
	8/17/04	1605			K25746	X	X								
	8/17/04	1605			K25746 (ms/msd)	X	X								
	8/17/04	1605			K25747	X	X								
	8/17/04	—			K25748	X	X								
	8/17/04	1435			K25749	X	X								
	8/17/04	1745			K25750	X	X								
	8/17/04	1550			K25751	X	X								
Relinquished by: (Signature)			DATE	TIME	Received by: (Signature)			Relinquished by: (Signature)			DATE	TIME	Relinquished by: (Signature)		
[Signature]			8/26/04	1600											
Relinquished by: (Signature)			DATE	TIME	Received by: (Signature)			Relinquished by: (Signature)			DATE	TIME	Relinquished by: (Signature)		
Relinquished by: (Signature)			DATE	TIME	Received for Laboratory by: (Signature)			DATE		TIME		Remarks:			
					[Signature]			8.27.04		0930					

6723 Towpath Road, P.O. Box 66
Syracuse, New York 13214-0066
TEL: (315) 446-9120

CHAIN OF CUSTODY RECORD

PROJ. NO.		PROJECT NAME													
64585		FORMER HAWTHORNE MILL OXBOW													
SAMPLERS: (Signature)															
STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION										REMARKS
	8/17/04	1420			K25752										RESULTS TO MIKE SCOVILLE
	8/18/04	1450			K25753										
	8/18/04	1450			K25754										
	8/17/04	1435			K25755										
	8/17/04	1435			K25756										
	8/17/04	1645			K25757										
	8/17/04	1745			K25758										
	8/17/04	—			K25759										
	8/17/04	1620			K25760										
	8/17/04	1620			K25760 (MS/MSD)										
	8/17/04	1420			K25761										
	8/17/04	1420			K25762										
	8/17/04	1620			K25763										
	8/17/04	1620			K25764										
Relinquished by: (Signature)			DATE	TIME	Received by: (Signature)			Relinquished by: (Signature)			DATE	TIME	Relinquished by: (Signature)		
			8/26/04	1600											
Relinquished by: (Signature)			DATE	TIME	Received by: (Signature)			Relinquished by: (Signature)			DATE	TIME	Relinquished by: (Signature)		
Relinquished by: (Signature)			DATE	TIME	Received for Laboratory by: (Signature)			DATE		TIME		Remarks:			
								8.27.04		0930					

6723 Towpath Road, P.O. Box 66
Syracuse, New York 13214-0066
TEL: (315) 446-9120

CHAIN OF CUSTODY RECORD

PROJ. NO.		PROJECT NAME																					
04585		FORMER HAWTHORNE MILL OXBOW																					
SAMPLERS: (Signature)																							
(Signature)																							
STA. NO.	DATE	TIME	COMPI. GRAB	STATION LOCATION							REMARKS												
	8/17/01	1620			KZ5765	1	X	X						RESULTS TO:									
	8/17/01	1620			KZ5766	1	X	X						MIKE SCOVILLE									
	8/17/01	—			KZ5767	1	X	X															
	8/26/01	1300			KZ5768	1	X	X															
	8/26/01	1300			KZ5769	1	X	X															
	8/26/01	—			KZ5770	1	X	X															
	8/26/01	1300			KZ5771	1	X	X															
	8/26/01	1300			KZ5771 (MS/mso)	Z	X	X															
Relinquished by: (Signature)					DATE	TIME	Received by: (Signature)					Relinquished by: (Signature)					DATE	TIME	Relinquished by: (Signature)				
(Signature)					8/26/01	1600																	
Relinquished by: (Signature)					DATE	TIME	Received by: (Signature)					Relinquished by: (Signature)					DATE	TIME	Relinquished by: (Signature)				
Relinquished by: (Signature)					DATE	TIME	Received for Laboratory by: (Signature)					DATE		TIME		Remarks:							



6723 Towpath Road, P.O. Box 66
Syracuse, New York 13214-0066
TEL: (315) 446-9120

CHAIN OF CUSTODY RECORD

COPY + ORIGINAL ON FILE
SDG # KAL342 ETR # 102037


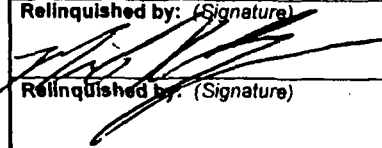
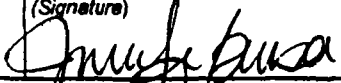
PROJ. NO.		PROJECT NAME												
64585		FORMER HANTHORNE MILL OXBOW												
SAMPLERS: (Signature)														
STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION					REMARKS				
	8/23/04	1012			K25715					Results to Mike Scoville				
	8/24/04	1047 ^{PM}	1245		K25709 (MS/MSD)									
	8/20/04	1012			K25716									
	8/22/04	1012			K25716 (MS/MSD)									
	8/18/04	1000			K25717									
	8/14/04	0820			K25718									
	8/18/04	0820			K25719									
	8/18/04	0820			K25720					received 8.27.04 0930 Judy Busa				
	8/17/04	1540			K25721									
	8/18/04	1030			K25722									
	8/18/04	0820			K25723									
	8/18/04	1000			K25724									
	8/18/04	0805			K25725									
	8/18/04	1630			K25726									
Relinquished by: (Signature)			DATE	TIME	Received by: (Signature)			Relinquished by: (Signature)			DATE	TIME	Relinquished by: (Signature)	
Relinquished by: (Signature)			DATE	TIME	Received by: (Signature)			Relinquished by: (Signature)			DATE	TIME	Relinquished by: (Signature)	
Relinquished by: (Signature)			DATE	TIME	Received for Laboratory by: (Signature)			DATE		TIME		Remarks:		
					Judy Busa			8.27.04		0930				

6723 Towpath Road, P.O. Box 66
Syracuse, New York 13214-0066
TEL: (315) 446-9120

COPY • ORIGINAL ON FILE

SDG # KAL393 ETR # 102039

CHAIN OF CUSTODY RECORD

PROJ. NO.		PROJECT NAME																	
64585		FORMER HAWTHORNE MILL OXBOW																	
SAMPLERS: (Signature) 																			
STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	PCB	TOC												REMARKS
	8/17/04	1420			KZ5752	X	X												RESULTS TO MIKE SCOVILLE
	8/18/04	1450			KZ5753	X	X												
	8/18/04	1450			KZ5754	X	X												
	8/17/04	1435			KZ5755	X	X												
	8/17/04	1435			KZ5756	X	X												
	8/17/04	1645			KZ5757	X	X												
	8/17/04	1745			KZ5758	X	X												
	8/17/04	—			KZ5759	X	X												
	8/17/04	1620			KZ5760	X	X												
	8/17/04	1620			KZ5760 (MS/MSD)	X	X												
	8/17/04	1420			KZ5761	X	X												
	8/17/04	1420			KZ5762	X	X												
	8/17/04	1620			KZ5763	X	X												
	8/17/04	1620			KZ5764	X	X												
Relinquished by: (Signature) 			DATE	TIME	Received by: (Signature)			Relinquished by: (Signature)			DATE	TIME	Relinquished by: (Signature)						
Relinquished by: (Signature)			DATE	TIME	Received by: (Signature)			Relinquished by: (Signature)			DATE	TIME	Relinquished by: (Signature)						
Relinquished by: (Signature)			DATE	TIME	Received for Laboratory by: (Signature)			DATE	TIME	Remarks:									
								8.27.04	0930										

Appendix D

STL Burlington

208 South Park Drive, Suite 1
Colchester, VT 05446Tel: 802 655 1203 Fax: 802 655 1248
www.stl-inc.com

September 14, 2004

Mr. Dennis Capria
Blasland, Bouck & Lee
6723 Towpath Rd.
Syracuse, NY 13214-0066Re: Laboratory Project No. 24000
Case 24000; SDG: KAL392

Dear Mr. Capria:

Enclosed are the analytical results for samples received by STL Burlington on August 27, 2004. This report is sequentially numbered starting with page 0001 and ending with page 0782. Laboratory numbers have been assigned and designated as follows:

<u>Lab ID</u>	<u>Client Sample ID</u>	<u>Sample Date</u>	<u>Sample Matrix</u>
Received: 08/27/04 ETR No: 102037			
583797	K25701	08/20/04	Soil
583798	K25702	08/20/04	Soil
583799	K25703	08/20/04	Soil
583800	K25704	08/20/04	Soil
583801	K25705	08/20/04	Soil
583802	K25706	08/20/04	Soil
583803	K25707	08/20/04	Soil
583804	K25708	08/20/04	Soil
583805	K25709	08/20/04	Soil
583805MS	K25709MS	08/20/04	Soil
583805MD	K25709MSD	08/20/04	Soil
583805DP	K25709REP	08/20/04	Soil
583806	K25710	08/20/04	Soil
583807	K25711	08/20/04	Soil
583808	K25712	08/20/04	Soil
583809	K25713	08/20/04	Soil
583810	K25714	08/20/04	Soil
583811	K25715	08/20/04	Soil
583812	K25716	08/20/04	Soil
583812MS	K25716MS	08/20/04	Soil
583812MD	K25716MSD	08/20/04	Soil
583812DP	K25716REP	08/20/04	Soil

Documentation of the condition of the samples at the time of their receipt and any exceptions to the laboratory's Sample Acceptance Policy is included in the Sample Handling section of this submittal.

0001A

Please note that the TOC preparation blank analyzed on 09/01/04 yielded the presence of TOC at a concentration slightly above reporting limit, however the associated samples contained greater than ten times the concentration in the blank. Also note that the replicate analysis performed on sample K25716 yielded elevated percent difference.

In order to more accurately quantify TOC concentrations from peaks with areas below that of the lowest calibration point (5000 mg/kg), the laboratory utilizes the response factor of just the low standard for quantitation purposes. QC and field samples resulting in peak areas from at least one replicate below that of the lowest calibration point are processed using this approach. In this delivery group sample, K25702 was processed using this low-level approach.

The analytical results presented in this data report were generated under a quality system that adheres to the requirements specified in the NELAC standard. This report shall not be reproduced, except in full, without the written approval of the laboratory. The release of the data in this report is authorized by the Laboratory Director or his designee, as verified by the following signature.

If there are any questions regarding this submittal, please contact Jim Madison at (802) 655-1203.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Wheeler", with a long horizontal flourish extending to the right.

Michael F. Wheeler, Ph.D.
Laboratory Director

Enclosure

0001B (last alpha)

[illegible]

K25701

Solids: 34.8

[illegible]

0006

Sample Report Summary

Client Sample No.

K25702

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL392

b Code: STLVT

Case No.: 24000

Lab Sample ID: 583798

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

Solids: 71.3

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		71.3	
IN847	TOC by Lloyd Kahn	09/01/04	BLKLG0901A	mg/Kg	1	701	23900	

0007

Sample Report Summary

Client Sample No.

K25703

Lab Name: STL BURLINGTON**Contract:**

SDG No.: KAL392

ab Code: STLVT

Case No.: 24000

Lab Sample ID: 583799

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

Solids: 71.4[illegible]

0008

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25704

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL392

Lab Code: STLVT

Case No.: 24000

Lab Sample ID: 583800

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

% Solids: 58.4

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		58.4	
IN847	TOC by Lloyd Kahn	09/01/04	BLK0901A	mg/Kg	1	856	51200	

0009

Printed on: 09/08/04 02:55 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25705

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL392

Lab Code: STLVT

Case No.: 24000

Lab Sample ID: 583801

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

Solids: 62.7

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		62.7	
IN847	TOC by Lloyd Kahn	09/01/04	BLKLG0901A	mg/Kg	1	797	48800	

0010

Printed on: 09/08/04 02:55 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25706

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL392

Lab Code: STLVT

Case No.: 24000

Lab Sample ID: 583802

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

Solids: 69.3

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		69.3	
IN847	TOC by Lloyd Kahn	09/01/04	BLK0901A	mg/Kg	1	722	41800	

0011

Printed on: 09/08/04 02:55 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25707

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL392

Lab Code: STLVT

Case No.: 24000

Lab Sample ID: 583803

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

Solids: 71.0

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		71.0	
IN847	TOC by Lloyd Kahn	09/01/04	BLK0901A	mg/Kg	1	704	48900	

0012

Printed on: 09/08/04 02:55 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25708

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL392

Lab Code: STLVT

Case No.: 24000

Lab Sample ID: 583804

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

Solids: 77.7

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		77.7	
IN847	TOC by Lloyd Kahn	09/01/04	BLKLG0901A	mg/Kg	1	644	47900	

0013

Printed on: 09/08/04 02:55 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25709

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL392

Lab Code: STLVT

Case No.: 24000

Lab Sample ID: 583805

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

Solids: 69.1

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		69.1	
IN847	TOC by Lloyd Kahn	09/01/04	BLK0901A	mg/Kg	1	724	28300	

0014

Printed on: 09/08/04 02:55 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25710

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL392

Lab Code: STLVT

Case No.: 24000

Lab Sample ID: 583806

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

Solids: 41.8

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		41.8	
IN847	TOC by Lloyd Kahn	09/01/04	BLKLK0901A	mg/Kg	1	1200	89300	

0015

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25711

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL392

Lab Code: STLVT

Case No.: 24000

Lab Sample ID: 583807

Matrix: SOIL

Client: BLAB02

Date Received: 08/27/04

Solids: 66.4

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		66.4	
IN847	TOC by Lloyd Kahn	09/01/04	BLKLG0901A	mg/Kg	1	753	14700	

0016

Printed on: 09/08/04 02:55 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25712

Sample Name: STL BURLINGTON

Contract:

SDG No.: KAL392

Lab Code: STLVT

Case No.: 24000

Lab Sample ID: 583808

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

Solids: 81.0

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		81.0	
IN847	TOC by Lloyd Kahn	09/01/04	BLK0901A	mg/Kg	1	617	16500	

0017

Printed on: 09/08/04 02:55 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25713

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL392

Lab Code: STLVT

Case No.: 24000

Lab Sample ID: 583809

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

Solids: 89.9

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		89.9	
IN847	TOC by Lloyd Kahn	09/01/04	BLKLK0901A	mg/Kg	1	556	45100	

0018

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25714

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL392

Lab Code: STLVT

Case No.: 24000

Lab Sample ID: 583810

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

Solids: 76.9

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		76.9	
IN847	TOC by Lloyd Kahn	09/01/04	BLKLK0901A	mg/Kg	1	650	126700	

0019

Printed on: 09/08/04 02:55 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25715

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL392

Lab Code: STLVT

Case No.: 24000

Lab Sample ID: 583811

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

Solids: 92.4

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		92.4	
IN847	TOC by Lloyd Kahn	09/01/04	BLKLG0901A	mg/Kg	1	541	168400	

0020

Printed on: 09/08/04 02:55 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25716

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL392

Lab Code: STLVT

Case No.: 24000

Lab Sample ID: 583812

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

Solids: 88.1

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		88.1	
IN847	TOC by Lloyd Kahn	09/01/04	BLKLG0901A	mg/Kg	1	568	58800	

0021

Printed on: 09/08/04 02:55 PM

FORM 1
AROCOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

K25701

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL392

Phase Type: SOIL

Lab Sample ID: 583797

Phase Weight: 10.02 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 09/01/04

Dilution Factor: 1.0

Date Analyzed: 09/09/04

% Solids: 35

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	140	U
11104-28-2	Aroclor-1221	140	U
11141-16-5	Aroclor-1232	140	U
53469-21-9	Aroclor-1242	140	U
12672-29-6	Aroclor-1248	140	U
11097-69-1	Aroclor-1254	1200	
11096-82-5	Aroclor-1260	200	

FORM 1
AROCOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

K25702

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL392

Phase Type: SOIL

Lab Sample ID: 583798

Phase Weight: 10.00 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 09/01/04

Dilution Factor: 1.0

Date Analyzed: 09/09/04

% Solids: 71

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	70	U
11104-28-2	Aroclor-1221	70	U
11141-16-5	Aroclor-1232	70	U
53469-21-9	Aroclor-1242	70	U
12672-29-6	Aroclor-1248	70	U
11097-69-1	Aroclor-1254	170	
11096-82-5	Aroclor-1260	70	U

10205

FORM 1
AROCLOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

K25703

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL392

Phase Type: SOIL

Lab Sample ID: 583799

Phase Weight: 10.00 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 09/01/04

Dilution Factor: 1.0

Date Analyzed: 09/09/04

% Solids: 71

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	70	U
11104-28-2	Aroclor-1221	70	U
11141-16-5	Aroclor-1232	70	U
53469-21-9	Aroclor-1242	70	U
12672-29-6	Aroclor-1248	70	U
11097-69-1	Aroclor-1254	44	J
11096-82-5	Aroclor-1260	70	U

FORM 1
AROCOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

K25704

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL392

Phase Type: SOIL

Lab Sample ID: 583800

Phase Weight: 10.03 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 09/01/04

Dilution Factor: 1.0

Date Analyzed: 09/09/04

% Solids: 58

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	86	U
11104-28-2	Aroclor-1221	86	U
11141-16-5	Aroclor-1232	86	U
53469-21-9	Aroclor-1242	86	U
12672-29-6	Aroclor-1248	86	U
11097-69-1	Aroclor-1254	53	J
11096-82-5	Aroclor-1260	86	U

10226

**FORM 1
AROCOR ANALYSIS DATA SHEET**

EPA SAMPLE NO.

K25705

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL392

Phase Type: SOIL

Lab Sample ID: 583801

Phase Weight: 10.00 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 09/01/04

Dilution Factor: 1.0

Date Analyzed: 09/09/04

% Solids: 63

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	79	U
11104-28-2	Aroclor-1221	79	U
11141-16-5	Aroclor-1232	79	U
53469-21-9	Aroclor-1242	79	U
12672-29-6	Aroclor-1248	79	U
11097-69-1	Aroclor-1254	79	U
11096-82-5	Aroclor-1260	79	U

10237

FORM 1
AROCOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

K25706

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL392

Phase Type: SOIL

Lab Sample ID: 583802

Phase Weight: 10.04 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 09/01/04

Dilution Factor: 1.0

Date Analyzed: 09/09/04

% Solids: 69

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	72	U
11104-28-2	Aroclor-1221	72	U
11141-16-5	Aroclor-1232	72	U
53469-21-9	Aroclor-1242	72	U
12672-29-6	Aroclor-1248	72	U
11097-69-1	Aroclor-1254	72	U
11096-82-5	Aroclor-1260	72	U

**FORM 1
AROCOR ANALYSIS DATA SHEET**

EPA SAMPLE NO.

K25707

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL392

Phase Type: SOIL

Lab Sample ID: 583803

Phase Weight: 10.01 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 09/01/04

Dilution Factor: 1.0

Date Analyzed: 09/09/04

% Solids: 71

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	70	U
11104-28-2	Aroclor-1221	70	U
11141-16-5	Aroclor-1232	70	U
53469-21-9	Aroclor-1242	70	U
12672-29-6	Aroclor-1248	70	U
11097-69-1	Aroclor-1254	70	U
11096-82-5	Aroclor-1260	70	U

FORM 1
AROCOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

K25708

Lab Name: STL Burlington

Lab Code: STLV

Contract: 24000

Case: 24000

SDG: KAL392

Phase Type: SOIL

Lab Sample ID: 583804

Phase Weight: 10.00 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 09/01/04

Dilution Factor: 1.0

Date Analyzed: 09/09/04

% Solids: 78

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	64	U
11104-28-2	Aroclor-1221	64	U
11141-16-5	Aroclor-1232	64	U
53469-21-9	Aroclor-1242	64	U
12672-29-6	Aroclor-1248	64	U
11097-69-1	Aroclor-1254	64	U
11096-82-5	Aroclor-1260	64	U

10268

FORM 1
AROCOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

K25709

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL392

Phase Type: SOIL

Lab Sample ID: 583805

Phase Weight: 10.02 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 09/01/04

Dilution Factor: 1.0

Date Analyzed: 09/09/04

% Solids: 69

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	72	U
11104-28-2	Aroclor-1221	72	U
11141-16-5	Aroclor-1232	72	U
53469-21-9	Aroclor-1242	72	U
12672-29-6	Aroclor-1248	72	U
11097-69-1	Aroclor-1254	72	U
11096-82-5	Aroclor-1260	72	U

10278

FORM 1
AROCOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

K25710

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL392

Phase Type: SOIL

Lab Sample ID: 583806

Phase Weight: 10.00 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 09/01/04

Dilution Factor: 1.0

Date Analyzed: 09/09/04

% Solids: 42

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	120	U
11104-28-2	Aroclor-1221	120	U
11141-16-5	Aroclor-1232	120	U
53469-21-9	Aroclor-1242	120	U
12672-29-6	Aroclor-1248	120	U
11097-69-1	Aroclor-1254	840	
11096-82-5	Aroclor-1260	210	

0287

**FORM 1
AROCOR ANALYSIS DATA SHEET**

EPA SAMPLE NO.

K25711

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL392

Phase Type: SOIL

Lab Sample ID: 583807

Phase Weight: 10.03 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 09/01/04

Dilution Factor: 1.0

Date Analyzed: 09/09/04

% Solids: 66

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	76	U
11104-28-2	Aroclor-1221	76	U
11141-16-5	Aroclor-1232	76	U
53469-21-9	Aroclor-1242	76	U
12672-29-6	Aroclor-1248	76	U
11097-69-1	Aroclor-1254	47	J
11096-82-5	Aroclor-1260	100	

0300

FORM 1
AROCOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

K25712

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL392

Phase Type: SOIL

Lab Sample ID: 583808

Phase Weight: 10.02 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 09/01/04

Dilution Factor: 1.0

Date Analyzed: 09/09/04

% Solids: 81

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	62	U
11104-28-2	Aroclor-1221	62	U
11141-16-5	Aroclor-1232	62	U
53469-21-9	Aroclor-1242	62	U
12672-29-6	Aroclor-1248	62	U
11097-69-1	Aroclor-1254	62	U
11096-82-5	Aroclor-1260	37	J

10311

FORM 1
AROCOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

K25713

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL392

Phase Type: SOIL

Lab Sample ID: 583809

Phase Weight: 10.02 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 09/01/04

Dilution Factor: 1.0

Date Analyzed: 09/09/04

% Solids: 90

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	55	U
11104-28-2	Aroclor-1221	55	U
11141-16-5	Aroclor-1232	55	U
53469-21-9	Aroclor-1242	55	U
12672-29-6	Aroclor-1248	55	U
11097-69-1	Aroclor-1254	55	U
11096-82-5	Aroclor-1260	55	U

0322

FORM 1
AROCOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

K25714

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL392

Phase Type: SOIL

Lab Sample ID: 583810

Phase Weight: 10.03 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 09/01/04

Dilution Factor: 1.0

Date Analyzed: 09/09/04

% Solids: 77

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	65	U
11104-28-2	Aroclor-1221	65	U
11141-16-5	Aroclor-1232	65	U
53469-21-9	Aroclor-1242	65	U
12672-29-6	Aroclor-1248	65	U
11097-69-1	Aroclor-1254	44	J
11096-82-5	Aroclor-1260	65	U

0333

FORM 1
AROCLOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

K25715

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL392

Phase Type: SOIL

Lab Sample ID: 583811

Phase Weight: 10.01 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 09/01/04

Dilution Factor: 1.0

Date Analyzed: 09/09/04

% Solids: 92

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	54	U
11104-28-2	Aroclor-1221	54	U
11141-16-5	Aroclor-1232	54	U
53469-21-9	Aroclor-1242	54	U
12672-29-6	Aroclor-1248	54	U
11097-69-1	Aroclor-1254	54	U
11096-82-5	Aroclor-1260	54	U

0344

FORM 1
AROCOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

K25716

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL392

Phase Type: SOIL

Lab Sample ID: 583812

Phase Weight: 10.00 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 09/01/04

Dilution Factor: 1.0

Date Analyzed: 09/09/04

% Solids: 88

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	57	U
11104-28-2	Aroclor-1221	57	U
11141-16-5	Aroclor-1232	57	U
53469-21-9	Aroclor-1242	57	U
12672-29-6	Aroclor-1248	57	U
11097-69-1	Aroclor-1254	57	U
11096-82-5	Aroclor-1260	57	U

0355

STL Burlington

208 South Park Drive, Suite 1
Colchester, VT 05446Tel: 802 655 1203 Fax: 802 655 1248
www.stl-inc.com

September 15, 2004

Mr. Dennis Capria
Blasland, Bouck & Lee
6723 Towpath Rd.
Syracuse, NY 13214-0066Re Laboratory Project No. 24000
Case 24000; SDG KAL393

Dear Mr. Capria

Enclosed are the analytical results for samples received by STL Burlington on August 27, 2004.
This report is sequentially numbered starting with page 0001 and ending with page 1058.
Laboratory numbers have been assigned and designated as follows

<u>Lab ID</u>	<u>Client Sample ID</u>	<u>Sample Date</u>	<u>Sample Matrix</u>
Received 08/27/04 ETR No 102039			
583813	K25738	08/17/04	Soil
583814	K25740	08/17/04	Soil
583814MS	K25740MS	08/17/04	Soil
583814MD	K25740MSD	08/17/04	Soil
583814DP	K25740REP	08/17/04	Soil
583815	K25741	08/17/04	Soil
583816	K25742	08/17/04	Soil
583817	K25743	08/17/04	Soil
583818	K25744	08/17/04	Soil
583819	K25745	08/17/04	Soil
583820	K25746	08/17/04	Soil
583820MS	K25746MS	08/17/04	Soil
583820MD	K25746MSD	08/17/04	Soil
583820DP	K25746REP	08/17/04	Soil
583821	K25747	08/17/04	Soil
583822	K25748	08/17/04	Soil
583823	K25749	08/17/04	Soil
583824	K25750	08/17/04	Soil
583825	K25751	08/17/04	Soil
583826	K25752	08/17/04	Soil
583826MS	K25752MS	08/17/04	Soil
583826MD	K25752MSD	08/17/04	Soil
583826DP	K25752REP	08/17/04	Soil
583827	K25753	08/18/04	Soil
583828	K25754	08/18/04	Soil
583829	K25755	08/17/04	Soil

0001A

Documentation of the condition of the samples at the time of their receipt and any exceptions to the laboratory's Sample Acceptance Policy is included in the Sample Handling section of this submittal.

Please note that the TOC preparation blank analyzed on 08/28/04 yielded the presence of TOC at a concentration slightly above reporting limit, however all of the associated samples except K25740 contained greater than ten times the concentration in the blank. Also note that the replicate analyses performed on this samples K25740, K25746 and K25752 yielded elevated percent difference.


The original TOC analyses of the samples in this delivery group were accomplished within holding time, however samples K25744-K25755 were associated with calibration check standards with responses outside control criteria. These samples were re-analyzed beyond the prescribed holding time on an acceptable sequence. Although raw data from the original analysis is included in this case submittal, analytical results are reported from the second acquisitions.

In order to more accurately quantify TOC concentrations from peaks with areas below that of the lowest calibration point (5000 mg/kg), the laboratory utilizes the response factor of just the low standard for quantitation purposes. QC and field samples resulting in peak areas from at least one replicate below that of the lowest calibration point are processed using this approach. In this delivery group sample, K25702 was processed using this low-level approach.

The analytical results presented in this data report were generated under a quality system that adheres to the requirements specified in the NELAC standard. This report shall not be reproduced, except in full, without the written approval of the laboratory. The release of the data in this report is authorized by the Laboratory Director or his designee, as verified by the following signature.

If there are any questions regarding this submittal, please contact Jim Madison at (802 655-1203.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael F. Wheeler", followed by a long horizontal line.

Michael F. Wheeler, Ph.D.
Laboratory Director

Enclosure

0001B (last alpha

STL Burlington Data Qualifier Definitions

Organic

- U: Compound analyzed but not detected at a concentration above the reporting limit.
- J: Estimated value.
- N: Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds (TICs) where the identification of a compound is based on a mass spectral library search.
- P: Greater than 25% difference for detected concentrations between two GC columns. Unless otherwise specified in project QA plan, the lower of the two values is reported on the Form I.
- C: Pesticide result whose identification has been confirmed by GC/MS.
- B: Analyte is found in the sample and the associated method blank. The flag is used for tentatively identified compounds as well as positively identified compounds.
- E: Compounds whose concentrations exceed the upper limit of the calibration range of the instrument for that specific analysis.
- D: Concentrations identified from analysis of the sample at a secondary dilution.
- A: Tentatively identified compound is a suspected aldol condensation product.
- X,Y,Z: Laboratory defined flags that may be used alone or combined, as needed. If used, the description of the flag is defined in the project narrative.

Inorganic/Metals

- E: Reported value is estimated due to the presence of interference.
- N: Matrix spike sample recovery is not within control limits.
- * Duplicate sample analysis is not within control limits.
- B: The result reported is less than the reporting limit but greater than the instrument detection limit.
- U: Analyte was analyzed for but not detected above the reporting limit.

Method Codes:

P ICP-AES
MS ICP-MS
CV Cold Vapor AA
AS Semi-Automated Spectrophotometric

**FORM 1
AROCOR ANALYSIS DATA SHEET**

EPA SAMPLE NO.

K25738

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL393

Phase Type: SOIL

Lab Sample ID: 583813

Phase Weight: 10.01 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/28/04

Dilution Factor: 1.0

Date Analyzed: 09/03/04

% Solids: 41

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	120	U
11104-28-2	Aroclor-1221	120	U
11141-16-5	Aroclor-1232	120	U
53469-21-9	Aroclor-1242	120	U
12672-29-6	Aroclor-1248	240	
11097-69-1	Aroclor-1254	120	U
11096-82-5	Aroclor-1260	120	U

0018

FORM 1
AROCOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

K25740

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL393

Phase Type: SOIL

Lab Sample ID: 583814

Phase Weight: 10.02 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/28/04

Dilution Factor: 1.0

Date Analyzed: 09/03/04

% Solids: 78

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	64	U
11104-28-2	Aroclor-1221	64	U
11141-16-5	Aroclor-1232	64	U
53469-21-9	Aroclor-1242	64	U
12672-29-6	Aroclor-1248	64	U
11097-69-1	Aroclor-1254	64	U
11096-82-5	Aroclor-1260	64	U

0029

**FORM 1
AROCOR ANALYSIS DATA SHEET**

EPA SAMPLE NO.

K25741

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL393

Phase Type: SOIL

Lab Sample ID: 583815

Phase Weight: 10.02 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/28/04

Dilution Factor: 1.0

Date Analyzed: 09/03/04

% Solids: 68

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	73	U
11104-28-2	Aroclor-1221	73	U
11141-16-5	Aroclor-1232	73	U
53469-21-9	Aroclor-1242	73	U
12672-29-6	Aroclor-1248	73	U
11097-69-1	Aroclor-1254	130	
11096-82-5	Aroclor-1260	73	U

0039

FORM 1
AROCOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

K25742

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL393

Phase Type: SOIL

Lab Sample ID: 583816

Phase Weight: 10.00 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/28/04

Dilution Factor: 1.0

Date Analyzed: 09/03/04

% Solids: 72

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	69	U
11104-28-2	Aroclor-1221	69	U
11141-16-5	Aroclor-1232	69	U
53469-21-9	Aroclor-1242	39	J
12672-29-6	Aroclor-1248	69	U
11097-69-1	Aroclor-1254	110	
11096-82-5	Aroclor-1260	69	U

0050

**FORM 1
AROCOR ANALYSIS DATA SHEET**

EPA SAMPLE NO.

K25743

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL393

Phase Type: SOIL

Lab Sample ID: 583817

Phase Weight: 10.00 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/28/04

Dilution Factor: 1.0

Date Analyzed: 09/03/04

% Solids: 41

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	120	U
11104-28-2	Aroclor-1221	120	U
11141-16-5	Aroclor-1232	120	U
53469-21-9	Aroclor-1242	120	U
12672-29-6	Aroclor-1248	120	U
11097-69-1	Aroclor-1254	120	U
11096-82-5	Aroclor-1260	120	U

0061

**FORM 1
AROCOR ANALYSIS DATA SHEET**

EPA SAMPLE NO.

K25744

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL393

Phase Type: SOIL

Lab Sample ID: 583818

Phase Weight: 10.00 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/28/04

Dilution Factor: 1.0

Date Analyzed: 09/03/04

% Solids: 44

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	110	U
11104-28-2	Aroclor-1221	110	U
11141-16-5	Aroclor-1232	110	U
53469-21-9	Aroclor-1242	110	J
12672-29-6	Aroclor-1248	110	U
11097-69-1	Aroclor-1254	560	
11096-82-5	Aroclor-1260	240	

0072

**FORM 1
AROCOR ANALYSIS DATA SHEET**

EPA SAMPLE NO.

K25745

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL393

Phase Type: SOIL

Lab Sample ID: 583819

Phase Weight: 10.01 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/28/04

Dilution Factor: 1.0

Date Analyzed: 09/03/04

% Solids: 56

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	89	U
11104-28-2	Aroclor-1221	89	U
11141-16-5	Aroclor-1232	89	U
53469-21-9	Aroclor-1242	180	
12672-29-6	Aroclor-1248	89	U
11097-69-1	Aroclor-1254	360	
11096-82-5	Aroclor-1260	50	J

0086

**FORM 1
AROCOR ANALYSIS DATA SHEET**

EPA SAMPLE NO.

K25746

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL393

Phase Type: SOIL

Lab Sample ID: 583820

Phase Weight: 9.99 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/28/04

Dilution Factor: 1.0

Date Analyzed: 09/03/04

% Solids: 87

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	58	U
11104-28-2	Aroclor-1221	58	U
11141-16-5	Aroclor-1232	58	U
53469-21-9	Aroclor-1242	58	U
12672-29-6	Aroclor-1248	58	U
11097-69-1	Aroclor-1254	58	U
11096-82-5	Aroclor-1260	58	U

0097

**FORM 1
AROCOR ANALYSIS DATA SHEET**

EPA SAMPLE NO.

K25747

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL393

Phase Type: SOIL

Lab Sample ID: 583821

Phase Weight: 10.02 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/28/04

Dilution Factor: 1.0

Date Analyzed: 09/03/04

% Solids: 85

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	59	U
11104-28-2	Aroclor-1221	59	U
11141-16-5	Aroclor-1232	59	U
53469-21-9	Aroclor-1242	59	U
12672-29-6	Aroclor-1248	59	U
11097-69-1	Aroclor-1254	59	U
11096-82-5	Aroclor-1260	59	U

0107

**FORM 1
AROCOR ANALYSIS DATA SHEET**

EPA SAMPLE NO.

K25748

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL393

Phase Type: SOIL

Lab Sample ID: 583822

Phase Weight: 10.03 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/28/04

Dilution Factor: 1.0

Date Analyzed: 09/03/04

% Solids: 83

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	60	U
11104-28-2	Aroclor-1221	60	U
11141-16-5	Aroclor-1232	60	U
53469-21-9	Aroclor-1242	60	U
12672-29-6	Aroclor-1248	60	U
11097-69-1	Aroclor-1254	60	U
11096-82-5	Aroclor-1260	60	U

0117

FORM 1
AROCLOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

K25749

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL393

Phase Type: SOIL

Lab Sample ID: 583823

Phase Weight: 10.00 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/28/04

Dilution Factor: 1.0

Date Analyzed: 09/03/04

% Solids: 48

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	100	U
11104-28-2	Aroclor-1221	100	U
11141-16-5	Aroclor-1232	100	U
53469-21-9	Aroclor-1242	100	U
12672-29-6	Aroclor-1248	83	J
11097-69-1	Aroclor-1254	120	
11096-82-5	Aroclor-1260	130	

0127

**FORM 1
AROCOR ANALYSIS DATA SHEET**

EPA SAMPLE NO.

K25750

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL393

Phase Type: SOIL

Lab Sample ID: 583824

Phase Weight: 9.96 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/28/04

Dilution Factor: 1.0

Date Analyzed: 09/03/04

% Solids: 40

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	130	U
11104-28-2	Aroclor-1221	130	U
11141-16-5	Aroclor-1232	130	U
53469-21-9	Aroclor-1242	68	J
12672-29-6	Aroclor-1248	130	U
11097-69-1	Aroclor-1254	180	
11096-82-5	Aroclor-1260	84	J

0138

**FORM 1
AROCOR ANALYSIS DATA SHEET**

EPA SAMPLE NO.

K25751

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL393

Phase Type: SOIL

Lab Sample ID: 583825

Phase Weight: 10.00 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/28/04

Dilution Factor: 1.0

Date Analyzed: 09/03/04

% Solids: 62

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	81	U
11104-28-2	Aroclor-1221	81	U
11141-16-5	Aroclor-1232	81	U
53469-21-9	Aroclor-1242	81	U
12672-29-6	Aroclor-1248	81	U
11097-69-1	Aroclor-1254	150	
11096-82-5	Aroclor-1260	81	U

0149

FORM 1 AROCLOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

K25752

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL393

Phase Type: SOIL

Lab Sample ID: 583826

Phase Weight: 9.96 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/28/04

Dilution Factor: 1.0

Date Analyzed: 09/03/04

% Solids: 48

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	100	U
11104-28-2	Aroclor-1221	100	U
11141-16-5	Aroclor-1232	100	U
53469-21-9	Aroclor-1242	100	U
12672-29-6	Aroclor-1248	100	U
11097-69-1	Aroclor-1254	470	
11096-82-5	Aroclor-1260	100	U

0160

**FORM 1
AROCOR ANALYSIS DATA SHEET**

EPA SAMPLE NO.

K25753

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL393

Phase Type: SOIL

Lab Sample ID: 583827

Phase Weight: 9.95 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/28/04

Dilution Factor: 1.0

Date Analyzed: 09/03/04

% Solids: 80

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	63	U
11104-28-2	Aroclor-1221	63	U
11141-16-5	Aroclor-1232	63	U
53469-21-9	Aroclor-1242	63	U
12672-29-6	Aroclor-1248	63	U
11097-69-1	Aroclor-1254	63	U
11096-82-5	Aroclor-1260	63	U

0171

FORM 1
AROCLOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

K25754

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL393

Phase Type: SOIL

Lab Sample ID: 583828

Phase Weight: 9.95 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/28/04

Dilution Factor: 1.0

Date Analyzed: 09/03/04

% Solids: 78

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	64	U
11104-28-2	Aroclor-1221	64	U
11141-16-5	Aroclor-1232	64	U
53469-21-9	Aroclor-1242	64	U
12672-29-6	Aroclor-1248	64	U
11097-69-1	Aroclor-1254	64	U
11096-82-5	Aroclor-1260	51	J

0181

**FORM 1
AROCOR ANALYSIS DATA SHEET**

EPA SAMPLE NO.

K25755

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL393

Phase Type: SOIL

Lab Sample ID: 583829

Phase Weight: 10.01 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/28/04

Dilution Factor: 1.0

Date Analyzed: 09/03/04

% Solids: 70

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	71	U
11104-28-2	Aroclor-1221	71	U
11141-16-5	Aroclor-1232	71	U
53469-21-9	Aroclor-1242	71	U
12672-29-6	Aroclor-1248	71	U
11097-69-1	Aroclor-1254	71	U
11096-82-5	Aroclor-1260	71	U

0191

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25738

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL393

Lab Code: STLVT

Case No.: 24000

Lab Sample ID: 583813

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

Solids: 41.5

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		41.5	
IN847	TOC by Lloyd Kahn	08/28/04	BLKCLK0828A	mg/Kg	1	1200	109300	

0637

Printed on: 09/15/04 09:35 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25740

Location Name: STL BURLINGTON

Contract:

SDG No.: KAL393

Lab Code: STLVT

Case No.: 24000

Lab Sample ID: 583814

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

% Solids: 78.4

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		78.4	
IN847	TOC by Lloyd Kahn	08/28/04	BLKLG0828A	mg/Kg	1	638	5420	

0638

Printed on: 09/15/04 09:35 AM

Sample Report Summary

Client Sample No.

K25741

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL393

Code: STLVT

Case No.: 24000

Lab Sample ID: 583815

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

% Solids: 67.8

[illegible]

0639

Sample Report Summary

Client Sample No.

K25742

Name: STL BURLINGTON

Contract:

SDG No.: KAL393

Code: STLVT

Case No.: 24000

Lab Sample ID: 583816

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

% Solids: 71.7

[illegible]

0640

Received on: 09/15/04 09:35 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25743

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL393

Lab Code: STLVT

Case No.: 24000

Lab Sample ID: 583817

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

% Solids: 40.5

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		40.5	
IN847	TOC by Lloyd Kahn	08/28/04	BLKLK0828A	mg/Kg	1	1230	89900	

0641

Printed on: 09/15/04 09:35 AM

Sample Report Summary

Client Sample No. _____

K25744

Alt Name: STL BURLINGTON

Contract:

SDG No.: KAL393

Code: STLVT

Case No.: 24000

Lab Sample ID: 583818

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

6 solids: 44.3

[illegible]

0642

Printed on: 09/15/04 09:35 AM

Sample Report Summary

Client Sample No.

K25745

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL393

L) Code: STLVT

Case No.: 24000

Lab Sample ID: 583819

Matrix: SOIL

Client: BLAB02

Date Received: 08/27/04

% Solids: 56.5

[illegible]

0643

Printed on: 09/15/04 09:35 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25746

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL393

Code: STLVT

Case No.: 24000

Lab Sample ID: 583820

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

% Solids: 87.1

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		87.1	
IN847	TOC by Lloyd Kahn	09/13/04	BLKCLK0913B	mg/Kg	1	574	18900	J

0644

Printed on: 09/15/04 09:35 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25747

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL393

Lab Code: STLVT

Case No.: 24000

Lab Sample ID: 583821

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

% Solids: 84.6

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		84.6	
IN847	TOC by Lloyd Kahn	09/13/04	BLKLG0913B	mg/Kg	1	591	5520	J

0645

Printed on: 09/15/04 09:35 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25748

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL393

Code: STLVT

Case No.: 24000

Lab Sample ID: 583822

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

% Solids: 83.0

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		83.0	
IN847	TOC by Lloyd Kahn	09/13/04	BLKLG0913B	mg/Kg	1	602	24300	J

0646

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25749

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL393

Lab Code: STLVT

Case No.: 24000

Lab Sample ID: 583823

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

% Solids: 47.9

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		47.9	
IN847	TOC by Lloyd Kahn	09/13/04	BLKLG0913B	mg/Kg	1	1040	64700	J

0647

Printed on: 09/15/04 09:35 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25750

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL393

Lab Code: STLVT

Case No.: 24000

Lab Sample ID: 583824

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

% Solids: 39.5

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		39.5	
IN847	TOC by Lloyd Kahn	09/13/04	BLKLG0913B	mg/Kg	1	1270	113800	J

0648

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25751

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL393

Lab Code: STLVT

Case No.: 24000

Lab Sample ID: 583825

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

% Solids: 62.5

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		62.5	
IN847	TOC by Lloyd Kahn	09/13/04	BLKLK0913B	mg/Kg	1	800	44700	J

0649

Printed on: 09/15/04 09:35 AM

Sample Report Summary

Client Sample No.

K25752

.aU Name: STL BURLINGTON**Contract:**

SDG No.: KAL393

Code: STLVT

Case No.: 24000

Lab Sample ID: 583826

Matrix: SOIL

Client: BLAB02

Date Received: 08/27/04

% Solids: 47.6

[illegible]

0650

received on: 09/15/04 09:35 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25753

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL393

Code: STLVT

Case No.: 24000

Lab Sample ID: 583827

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

% Solids: 80.4

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		80.4	
IN847	TOC by Lloyd Kahn	09/13/04	BLKCLK0913B	mg/Kg	1	622	38500	J

0651

Printed on: 09/15/04 09:35 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25754

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL393

Code: STLVT

Case No.: 24000

Lab Sample ID: 583828

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

% Solids: 77.7

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		77.7	
IN847	TOC by Lloyd Kahn	09/13/04	BLKLG0913B	mg/Kg	1	644	22100	J

0652

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25755

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL393

Lab Code: STLVT

Case No.: 24000

Lab Sample ID: 583829

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

% Solids: 70.0

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		70.0	
IN847	TOC by Lloyd Kahn	09/13/04	BLKLK0913B	mg/Kg	1	707	40900	J

0653

Printed on: 09/15/04 09:35 AM

STL Burlington

208 South Park Drive, Suite 1
Colchester, VT 05446Tel: 802 655 1203 Fax: 802 655 1248
www.stl-inc.com

September 14, 2004

Mr. Dennis Capria
Blasland, Bouck & Lee
6723 Towpath Rd.
Syracuse, NY 13214-0066Re: Laboratory Project No. 24000
Case 24000; SDG: KAL394

Dear Mr. Capria:

Enclosed are the analytical results for samples received by STL Burlington on August 27, and 30, 2004. This report is sequentially numbered starting with page 0001 and ending with page 1038. Laboratory numbers have been assigned and designated as follows:

<u>Lab ID</u>	<u>Client Sample ID</u>	<u>Sample Date</u>	<u>Sample Matrix</u>
Received: 08/27/04 ETR No: 102040			
583830	K25756	08/17/04	Soil
583831	K25757	08/17/04	Soil
583832	K25758	08/17/04	Soil
583833	K25759	08/17/04	Soil
583834	K25760	08/17/04	Soil
583834MS	K25760MS	08/17/04	Soil
583834MD	K25760MSD	08/17/04	Soil
583834DP	K25760REP	08/17/04	Soil
583835	K25761	08/17/04	Soil
583836	K25762	08/17/04	Soil
583837	K25763	08/17/04	Soil
583838	K25764	08/17/04	Soil
583839	K25765	08/17/04	Soil
583840	K25766	08/17/04	Soil
583841	K25767	08/17/04	Soil
583842	K25768	08/26/04	Soil
583843	K25769	08/26/04	Soil
583844	K25770	08/26/04	Soil
583845	K25771	08/26/04	Soil
583845MS	K25771MS	08/26/04	Soil
583845MD	K25771MSD	08/26/04	Soil
583845DP	K25771REP	08/26/04	Soil

Received: 08/30/04 ETR No: 102064

584009	K25717	08/18/04	Soil
584010	K25718	08/18/04	Soil

0001A

Documentation of the condition of the samples at the time of their receipt and any exceptions to the laboratory's Sample Acceptance Policy is included in the Sample Handling section of this submittal.

Please note that the TOC preparation blank analyzed on 09/03/04 yielded the presence of TOC at a concentration slightly above reporting limit, however the associated samples contained greater than ten times the concentration in the blank.

In order to more accurately quantify TOC concentrations from peaks with areas below that of the lowest calibration point (5000 mg/kg), the laboratory utilizes the response factor of just the low standard for quantitation purposes. QC and field samples resulting in peak areas from at least one replicate below that of the lowest calibration point are processed using this approach. In this delivery group sample, K25768 was processed using this low-level approach.

The TOC analysis of sample K25760 was accomplished within the prescribed holding time. The matrix spike and replicate analyses of this sample were performed three days beyond the prescribed holding time.

The PCB analyses of several samples in this delivery group yielded surrogate recoveries outside control criteria due to suspected matrix interference. Samples K25769, K25770 and K25771 were analyzed at dilution to provide for quantitation of target compounds from concentrations within calibration range.

The analytical results presented in this data report were generated under a quality system that adheres to the requirements specified in the NELAC standard. This report shall not be reproduced, except in full, without the written approval of the laboratory. The release of the data in this report is authorized by the Laboratory Director or his designee, as verified by the following signature.

If there are any questions regarding this submittal, please contact Jim Madison at (802) 655-1203.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Wheeler", with a stylized flourish at the end.

Michael F. Wheeler, Ph.D.
Laboratory Director

Enclosure

0001B (last alpha)

FORM 1
AROCLOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

K25756

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL394

Phase Type: SOIL

Lab Sample ID: 583830

Phase Weight: 10.00 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/29/04

Dilution Factor: 1.0

Date Analyzed: 09/07/04

% Solids: 34

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	150	U
11104-28-2	Aroclor-1221	150	U
11141-16-5	Aroclor-1232	150	U
53469-21-9	Aroclor-1242	150	U
12672-29-6	Aroclor-1248	150	U
11097-69-1	Aroclor-1254	150	U
11096-82-5	Aroclor-1260	150	U

0357

**FORM 1
AROCOR ANALYSIS DATA SHEET**

EPA SAMPLE NO.

K25757

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL394

Phase Type: SOIL

Lab Sample ID: 583831

Phase Weight: 10.00 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/29/04

Dilution Factor: 1.0

Date Analyzed: 09/07/04

% Solids: 38

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	130	U
11104-28-2	Aroclor-1221	130	U
11141-16-5	Aroclor-1232	130	U
53469-21-9	Aroclor-1242	84	J
12672-29-6	Aroclor-1248	130	U
11097-69-1	Aroclor-1254	160	
11096-82-5	Aroclor-1260	130	U

0368

**FORM 1
AROCOR ANALYSIS DATA SHEET**

EPA SAMPLE NO.

K25758

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL394

Phase Type: SOIL

Lab Sample ID: 583832

Phase Weight: 10.01 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/29/04

Dilution Factor: 1.0

Date Analyzed: 09/07/04

% Solids: 39

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	130	U
11104-28-2	Aroclor-1221	130	U
11141-16-5	Aroclor-1232	130	U
53469-21-9	Aroclor-1242	130	U
12672-29-6	Aroclor-1248	130	U
11097-69-1	Aroclor-1254	130	U
11096-82-5	Aroclor-1260	84	J

0380

FORM 1
AROCLOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

K25759

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL394

Phase Type: SOIL

Lab Sample ID: 583833

Phase Weight: 10.01 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/29/04

Dilution Factor: 1.0

Date Analyzed: 09/07/04

% Solids: 37

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	140	U
11104-28-2	Aroclor-1221	140	U
11141-16-5	Aroclor-1232	140	U
53469-21-9	Aroclor-1242	140	U
12672-29-6	Aroclor-1248	140	U
11097-69-1	Aroclor-1254	140	U
11096-82-5	Aroclor-1260	140	U

0391

**FORM 1
AROCOR ANALYSIS DATA SHEET**

EPA SAMPLE NO.

K25760

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL394

Phase Type: SOIL

Lab Sample ID: 583834

Phase Weight: 10.00 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/29/04

Dilution Factor: 1.0

Date Analyzed: 09/07/04

% Solids: 39

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	130	U
11104-28-2	Aroclor-1221	130	U
11141-16-5	Aroclor-1232	130	U
53469-21-9	Aroclor-1242	130	U
12672-29-6	Aroclor-1248	130	U
11097-69-1	Aroclor-1254	96	J
11096-82-5	Aroclor-1260	130	U

0402

**FORM 1
AROCOR ANALYSIS DATA SHEET**

EPA SAMPLE NO.

K25761

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL394

Phase Type: SOIL

Lab Sample ID: 583835

Phase Weight: 10.00 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/29/04

Dilution Factor: 1.0

Date Analyzed: 09/07/04

% Solids: 34

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	150	U
11104-28-2	Aroclor-1221	150	U
11141-16-5	Aroclor-1232	150	U
53469-21-9	Aroclor-1242	150	U
12672-29-6	Aroclor-1248	150	U
11097-69-1	Aroclor-1254	150	U
11096-82-5	Aroclor-1260	150	U

0413

**FORM 1
AROCOR ANALYSIS DATA SHEET**

EPA SAMPLE NO.

K25762

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL394

Phase Type: SOIL

Lab Sample ID: 583836

Phase Weight: 10.04 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/29/04

Dilution Factor: 1.0

Date Analyzed: 09/08/04

% Solids: 35

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	140	U
11104-28-2	Aroclor-1221	140	U
11141-16-5	Aroclor-1232	140	U
53469-21-9	Aroclor-1242	140	U
12672-29-6	Aroclor-1248	140	U
11097-69-1	Aroclor-1254	140	U
11096-82-5	Aroclor-1260	140	U

0424

FORM 1
AROCOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

K25763

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL394

Phase Type: SOIL

Lab Sample ID: 583837

Phase Weight: 9.96 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/29/04

Dilution Factor: 1.0

Date Analyzed: 09/08/04

% Solids: 42

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	120	U
11104-28-2	Aroclor-1221	120	U
11141-16-5	Aroclor-1232	120	U
53469-21-9	Aroclor-1242	190	
12672-29-6	Aroclor-1248	120	U
11097-69-1	Aroclor-1254	300	
11096-82-5	Aroclor-1260	65	J

10436

FORM 1
AROCLOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

K25764

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL394

Phase Type: SOIL

Lab Sample ID: 583838

Phase Weight: 9.99 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/29/04

Dilution Factor: 1.0

Date Analyzed: 09/08/04

% Solids: 93

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	54	U
11104-28-2	Aroclor-1221	54	U
11141-16-5	Aroclor-1232	54	U
53469-21-9	Aroclor-1242	54	U
12672-29-6	Aroclor-1248	54	U
11097-69-1	Aroclor-1254	54	U
11096-82-5	Aroclor-1260	54	U

10447

**FORM 1
AROCOR ANALYSIS DATA SHEET**

EPA SAMPLE NO.

K25765

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL394

Phase Type: SOIL

Lab Sample ID: 583839

Phase Weight: 10.00 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/29/04

Dilution Factor: 1.0

Date Analyzed: 09/08/04

% Solids: 45

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	110	U
11104-28-2	Aroclor-1221	110	U
11141-16-5	Aroclor-1232	110	U
53469-21-9	Aroclor-1242	110	U
12672-29-6	Aroclor-1248	110	U
11097-69-1	Aroclor-1254	110	U
11096-82-5	Aroclor-1260	110	U

10456

**FORM 1
AROCOR ANALYSIS DATA SHEET**

EPA SAMPLE NO.

K25766

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL394

Phase Type: SOIL

Lab Sample ID: 583840

Phase Weight: 10.05 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/29/04

Dilution Factor: 1.0

Date Analyzed: 09/08/04

% Solids: 33

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	150	U
11104-28-2	Aroclor-1221	150	U
11141-16-5	Aroclor-1232	150	U
53469-21-9	Aroclor-1242	150	U
12672-29-6	Aroclor-1248	150	U
11097-69-1	Aroclor-1254	410	
11096-82-5	Aroclor-1260	96	J

10467

FORM 1
AROCLOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

K25767

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL394

Phase Type: SOIL

Lab Sample ID: 583841

Phase Weight: 10.03 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/29/04

Dilution Factor: 1.0

Date Analyzed: 09/08/04

% Solids: 37

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	130	U
11104-28-2	Aroclor-1221	130	U
11141-16-5	Aroclor-1232	130	U
53469-21-9	Aroclor-1242	85	J
12672-29-6	Aroclor-1248	130	U
11097-69-1	Aroclor-1254	410	
11096-82-5	Aroclor-1260	89	J

0479

**FORM 1
AROCOR ANALYSIS DATA SHEET**

EPA SAMPLE NO.

K25768

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL394

Phase Type: SOIL

Lab Sample ID: 583842

Phase Weight: 10.03 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/29/04

Dilution Factor: 1.0

Date Analyzed: 09/08/04

% Solids: 88

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	57	U
11104-28-2	Aroclor-1221	57	U
11141-16-5	Aroclor-1232	57	U
53469-21-9	Aroclor-1242	57	U
12672-29-6	Aroclor-1248	57	U
11097-69-1	Aroclor-1254	57	U
11096-82-5	Aroclor-1260	57	U

10491

FORM 1
AROCLOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

K25769

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL394

Phase Type: SOIL

Lab Sample ID: 583843

Phase Weight: 10.01 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/29/04

Dilution Factor: 2.0

Date Analyzed: 09/08/04

% Solids: 37

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	270	U
11104-28-2	Aroclor-1221	270	U
11141-16-5	Aroclor-1232	270	U
53469-21-9	Aroclor-1242	270	U
12672-29-6	Aroclor-1248	270	U
11097-69-1	Aroclor-1254	1600	
11096-82-5	Aroclor-1260	310	

10502

**FORM 1
AROCOR ANALYSIS DATA SHEET**

EPA SAMPLE NO.

K25770

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL394

Phase Type: SOIL

Lab Sample ID: 583844

Phase Weight: 9.99 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/29/04

Dilution Factor: 2.0

Date Analyzed: 09/08/04

% Solids: 39

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	260	U
11104-28-2	Aroclor-1221	260	U
11141-16-5	Aroclor-1232	260	U
53469-21-9	Aroclor-1242	260	U
12672-29-6	Aroclor-1248	260	U
11097-69-1	Aroclor-1254	1400	
11096-82-5	Aroclor-1260	220	J

0515

**FORM 1
AROCOR ANALYSIS DATA SHEET**

EPA SAMPLE NO.

K25771

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL394

Phase Type: SOIL

Lab Sample ID: 583845

Phase Weight: 10.03 (g)

Date Received: 08/27/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/29/04

Dilution Factor: 3.0

Date Analyzed: 09/08/04

% Solids: 31

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	480	U
11104-28-2	Aroclor-1221	480	U
11141-16-5	Aroclor-1232	480	U
53469-21-9	Aroclor-1242	480	U
12672-29-6	Aroclor-1248	480	U
11097-69-1	Aroclor-1254	3000	
11096-82-5	Aroclor-1260	360	J

10528

FORM 1
AROCLOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

K25717

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL394

Phase Type: SOIL

Lab Sample ID: 584009

Phase Weight: 10.05 (g)

Date Received: 08/30/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/31/04

Dilution Factor: 1.0

Date Analyzed: 09/08/04

% Solids: 26

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	190	U
11104-28-2	Aroclor-1221	190	U
11141-16-5	Aroclor-1232	190	U
53469-21-9	Aroclor-1242	190	U
12672-29-6	Aroclor-1248	190	U
11097-69-1	Aroclor-1254	910	
11096-82-5	Aroclor-1260	100	J

10541

**FORM 1
AROCOR ANALYSIS DATA SHEET**

EPA SAMPLE NO.

K25718

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL394

Phase Type: SOIL

Lab Sample ID: 584010

Phase Weight: 10.02 (g)

Date Received: 08/30/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/31/04

Dilution Factor: 2.0

Date Analyzed: 09/08/04

% Solids: 45

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	220	U
11104-28-2	Aroclor-1221	220	U
11141-16-5	Aroclor-1232	220	U
53469-21-9	Aroclor-1242	130	J
12672-29-6	Aroclor-1248	220	U
11097-69-1	Aroclor-1254	1100	
11096-82-5	Aroclor-1260	170	J

10552

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25756

Name: STL BURLINGTON

Contract:

SDG No.: KAL394

Code: STLVT

Case No.: 24000

Lab Sample ID: 583830

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

% Solids: 34.2

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		34.2	
IN647	TOC by Lloyd Kahn	08/30/04	BLKLK0830B	mg/Kg	1	1460	113000	J

0007

Printed on: 09/13/04 08:51 AM

[illegible]

K25757

Solids: 37.7

0008

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25758

Location Name: STL BURLINGTON

Contract:

SDG No.: KAL394

Location Code: STLVT

Case No.: 24000

Lab Sample ID: 583832

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

% Solids: 39.4

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		39.4	
IN847	TOC by Lloyd Kahn	08/30/04	BLKLG0830B	mg/Kg	1	1270	100200	J

0009

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25759

an+ Name: STL BURLINGTON

Contract:

SDG No.: KAL394

a Code: STLVT

Case No.: 24000

Lab Sample ID: 583833

atrix: SOIL

Client: BLABO2

Date Received: 08/27/04

olids: 37.4

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		37.4	
IN847	TOC by Lloyd Kahn	08/30/04	BLK0830B	mg/Kg	1	1340	101700	J

0010

Printed on: 09/13/04 08:52 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25760

Name: STL BURLINGTON

Contract:

SDG No.: KAL394

Code: STLVT

Case No.: 24000

Lab Sample ID: 583834

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

% Solids: 39.3

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		39.3	
IN847	TOC by Lloyd Kahn	08/30/04	BLK0830B	mg/Kg	1	1270	80900	J

0011

Printed on: 09/13/04 08:52 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25761

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL394

Code: STLVT

Case No.: 24000

Lab Sample ID: 583835

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

% Solids: 34.1

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		34.1	
IN847	TOC by Lloyd Kahn	08/30/04	BLK0830B	mg/Kg	1	1470	108500	J

0012

Printed on: 09/13/04 08:52 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25762

Name: STL BURLINGTON

Contract:

SDG No.: KAL394

Code: STLV

Case No.: 24000

Lab Sample ID: 583836

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

Solids: 35.0

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		35.0	
IN847	TOC by Lloyd Kahn	08/30/04	BLK0830B	mg/Kg	1	1430	124600	J

0013

Printed on: 09/13/04 08:52 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25763

Name: STL BURLINGTON

Contract:

SDG No.: KAL394

Code: STLV

Case No.: 24000

Lab Sample ID: 583837

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

Solids: 41.6

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		41.6	
IN847	TOC by Lloyd Kahn	08/30/04	BLKLK0830B	mg/Kg	1	1200	189400	J

Printed on: 09/13/04 08:52 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25764

Name: STL BURLINGTON

Contract:

SDG No.: KAL394

Lab Code: STLVT

Case No.: 24000

Lab Sample ID: 583838

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

% Solids: 93.2

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		93.2	
IN847	TOC by Lloyd Kahn	08/30/04	BLKLG0830B	mg/Kg	1	536	21100	J

0016

Printed on: 09/13/04 08:52 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25765

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL394

Code: STLVT

Case No.: 24000

Lab Sample ID: 583839

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

% Solids: 45.4

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		45.4	
IN847	TOC by Lloyd Kahn	08/30/04	BLKLK0830B	mg/Kg	1	1100	81500	5

0017

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25766

Name: STL BURLINGTON

Contract:

SDG No.: KAL394

Code: STLVT

Case No.: 24000

Lab Sample ID: 583840

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

% Solids: 32.6

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		32.6	
IN847	TOC by Lloyd Kahn	08/30/04	BLKCLK0830B	mg/Kg	1	1530	139100	J

0018

Printed on: 09/13/04 08:52 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25767

Name: STL BURLINGTON

Contract:

SDG No.: KAL394

Code: STLV

Case No.: 24000

Lab Sample ID: 583841

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

% Solids: 37.2

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		37.2	
IN847	TOC by Lloyd Kahn	08/30/04	BLKLK0830B	mg/Kg	1	1340	89200	J

0019

Printed on: 09/13/04 08:52 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25768

Name: STL BURLINGTON

Contract:

SDG No.: KAL394

Code: STLVT

Case No.: 24000

Lab Sample ID: 583842

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

% Solids: 87.6

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		87.6	
IN847	TOC by Lloyd Kahn	08/30/04	BLK0830B	mg/Kg	1	571	9050	J

0020

Printed on: 09/13/04 08:52 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25769

Name: STL BURLINGTON

Contract:

SDG No.: KAL394

Code: STLVT

Case No.: 24000

Lab Sample ID: 583843

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

Solids: 36.7

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		36.7	
IN847	TOC by Lloyd Kahn	08/30/04	BLKLO830B	mg/Kg	1	1360	88300	J

0021

Printed on: 09/13/04 08:52 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25770

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL394

Lab Code: STLV

Case No.: 24000

Lab Sample ID: 583844

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

% Solids: 39.2

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		39.2	
IN847	TOC by Lloyd Kahn	08/30/04	BLK0830B	mg/Kg	1	1280	105700	J

0022

Printed on: 09/13/04 08:52 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25771

Name: STL BURLINGTON

Contract:

SDG No.: KAL394

Code: STLVT

Case No.: 24000

Lab Sample ID: 583845

Matrix: SOIL

Client: BLABO2

Date Received: 08/27/04

Solids: 30.9

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		30.9	
IN847	TOC by Lloyd Kahn	08/30/04	BLKLG0830B	mg/Kg	1	1620	110000	J

0023

Printed on: 09/13/04 08:52 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25717

Name: STL BURLINGTON

Contract:

SDG No.: KAL394

Code: STLVT

Case No.: 24000

Lab Sample ID: 584009

Matrix: SOIL

Client: BLABO2

Date Received: 08/30/04

% Solids: 26.5

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		26.5	
IN847	TOC by Lloyd Kahn	08/31/04	BLKLK0831A	mg/Kg	1	1890	239600	

0024

Printed on: 09/13/04 08:52 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25718

Name: STL BURLINGTON

Contract:

SDG No.: KAL394

Code: STLV

Case No.: 24000

Lab Sample ID: 584010

Matrix: SOIL

Client: BLABO2

Date Received: 08/30/04

Solids: 44.7

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		44.7	
IN847	TOC by Lloyd Kahn	08/31/04	BLK0831A	mg/Kg	1	1120	50500	

0025

Printed on: 09/13/04 08:52 AM

STL Burlington

208 South Park Drive, Suite 1
Colchester, VT 05446Tel: 802 655 1203 Fax: 802 655 1248
www.stl-inc.com

September 16, 2004

Mr. Dennis Capria
Blasland, Bouck & Lee
6723 Towpath Rd.
Syracuse, NY 13214-0066Re Laboratory Project No. 24000
Case 24000; SDG KAL395

Dear Mr. Capria

Enclosed are the analytical results for samples received by STL Burlington on August 30, 2004.
This report is sequentially numbered starting with page 0001 and ending with page 0991.
Laboratory numbers have been assigned and designated as follows

<u>Lab ID</u>	<u>Client Sample ID</u>	<u>Sample Date</u>	<u>Sample Matrix</u>
Received 08/30/04 ETR No 102066			
584011	K25719	08/18/04	Soil
584012	K25720	08/18/04	Soil
584013	K25721	08/17/04	Soil
584014	K25722	08/18/04	Soil
584015	K25723	08/18/04	Soil
584016	K25724	08/18/04	Soil
584017	K25725	08/18/04	Soil
584018	K25726	08/18/04	Soil
584019	K25727	08/18/04	Soil
584019MS	K25727MS	08/18/04	Soil
584019MD	K25727MSD	08/18/04	Soil
584019DP	K25727REP	08/18/04	Soil
584020	K25728	08/18/04	Soil
584021	K25729	08/18/04	Soil
584022	K25730	08/18/04	Soil
584023	K25731	08/18/04	Soil
584024	K25732	08/18/04	Soil
584025	K25733	08/18/04	Soil
584026	K25734	08/17/04	Soil
584027	K25735	08/17/04	Soil
584028	K25736	08/17/04	Soil
584029	K25737	08/18/04	Soil
584030	K25739	08/17/04	Soil

Mr. Dennis Capria
September 16, 2004
Page 2 of 2

Documentation of the condition of the samples at the time of their receipt and any exceptions to the laboratory's Sample Acceptance Policy is included in the Sample Handling section of this submittal.

In order to more accurately quantify TOC concentrations from peaks with areas below that of the lowest calibration point (5000 mg/kg), the laboratory utilizes the response factor of just the low standard for quantitation purposes. QC and field samples resulting in peak areas from at least one replicate below that of the lowest calibration point are processed using this approach. In this delivery group samples, K25722, K25729 and K25732 were processed using this low-level approach.

The analytical results presented in this data report were generated under a quality system that adheres to the requirements specified in the NELAC standard. This report shall not be reproduced, except in full, without the written approval of the laboratory. The release of the data in this report is authorized by the Laboratory Director or his designee, as verified by the following signature.

If there are any questions regarding this submittal, please contact Jim Madison at (802 655-1203.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Wheeler", followed by a long horizontal line.

Michael F. Wheeler, Ph.D.
Laboratory Director

Enclosure

0001B (last alpha

FORM 1
AROCLOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

K25719

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL395

Phase Type: SOIL

Lab Sample ID: 584011

Phase Weight: 10.04 (g)

Date Received: 08/30/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/30/04

Dilution Factor: 1.0

Date Analyzed: 09/09/04

% Solids: 88

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	57	U
11104-28-2	Aroclor-1221	57	U
11141-16-5	Aroclor-1232	57	U
53469-21-9	Aroclor-1242	57	U
12672-29-6	Aroclor-1248	57	U
11097-69-1	Aroclor-1254	57	U
11096-82-5	Aroclor-1260	57	U

0373

**FORM 1
AROCOR ANALYSIS DATA SHEET**

EPA SAMPLE NO.

K25720

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL395

Phase Type: SOIL

Lab Sample ID: 584012

Phase Weight: 10.01 (g)

Date Received: 08/30/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/30/04

Dilution Factor: 1.0

Date Analyzed: 09/09/04

% Solids: 52

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	96	U
11104-28-2	Aroclor-1221	96	U
11141-16-5	Aroclor-1232	96	U
53469-21-9	Aroclor-1242	96	U
12672-29-6	Aroclor-1248	96	U
11097-69-1	Aroclor-1254	96	U
11096-82-5	Aroclor-1260	96	U

0384

**FORM 1
AROCOR ANALYSIS DATA SHEET**

EPA SAMPLE NO.

K25721

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL395

Phase Type: SOIL

Lab Sample ID: 584013

Phase Weight: 9.98 (g)

Date Received: 08/30/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/30/04

Dilution Factor: 1.0

Date Analyzed: 09/09/04

% Solids: 56

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	89	U
11104-28-2	Aroclor-1221	89	U
11141-16-5	Aroclor-1232	89	U
53469-21-9	Aroclor-1242	89	U
12672-29-6	Aroclor-1248	89	U
11097-69-1	Aroclor-1254	130	
11096-82-5	Aroclor-1260	89	U

0395

**FORM 1
AROCOR ANALYSIS DATA SHEET**

EPA SAMPLE NO.

K25722

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL395

Phase Type: SOIL

Lab Sample ID: 584014

Phase Weight: 10.03 (g)

Date Received: 08/30/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/30/04

Dilution Factor: 1.0

Date Analyzed: 09/09/04

% Solids: 83

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	60	U
11104-28-2	Aroclor-1221	60	U
11141-16-5	Aroclor-1232	60	U
53469-21-9	Aroclor-1242	60	U
12672-29-6	Aroclor-1248	60	U
11097-69-1	Aroclor-1254	60	U
11096-82-5	Aroclor-1260	60	U

0406

**FORM 1
AROCOR ANALYSIS DATA SHEET**

EPA SAMPLE NO.

K25723

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL395

Phase Type: SOIL

Lab Sample ID: 584015

Phase Weight: 10.05 (g)

Date Received: 08/30/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/30/04

Dilution Factor: 1.0

Date Analyzed: 09/09/04

% Solids: 82

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	61	U
11104-28-2	Aroclor-1221	61	U
11141-16-5	Aroclor-1232	61	U
53469-21-9	Aroclor-1242	61	U
12672-29-6	Aroclor-1248	61	U
11097-69-1	Aroclor-1254	41	J
11096-82-5	Aroclor-1260	61	U

0415

FORM 1
AROCOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

K25724

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL395

Phase Type: SOIL

Lab Sample ID: 584016

Phase Weight: 10.03 (g)

Date Received: 08/30/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/30/04

Dilution Factor: 1.0

Date Analyzed: 09/09/04

% Solids: 83

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	60	U
11104-28-2	Aroclor-1221	60	U
11141-16-5	Aroclor-1232	60	U
53469-21-9	Aroclor-1242	60	U
12672-29-6	Aroclor-1248	60	U
11097-69-1	Aroclor-1254	60	U
11096-82-5	Aroclor-1260	60	U

0426

FORM 1
AROCLOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

K25725

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL395

Phase Type: SOIL

Lab Sample ID: 584017

Phase Weight: 9.99 (g)

Date Received: 08/30/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/30/04

Dilution Factor: 1.0

Date Analyzed: 09/09/04

% Solids: 37

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	140	U
11104-28-2	Aroclor-1221	140	U
11141-16-5	Aroclor-1232	140	U
53469-21-9	Aroclor-1242	140	U
12672-29-6	Aroclor-1248	140	U
11097-69-1	Aroclor-1254	140	U
11096-82-5	Aroclor-1260	140	U

0435

**FORM 1
AROCOR ANALYSIS DATA SHEET**

EPA SAMPLE NO.

K25726

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL395

Phase Type: SOIL

Lab Sample ID: 584018

Phase Weight: 10.00 (g)

Date Received: 08/30/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/30/04

Dilution Factor: 1.0

Date Analyzed: 09/09/04

% Solids: 71

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	70	U
11104-28-2	Aroclor-1221	70	U
11141-16-5	Aroclor-1232	70	U
53469-21-9	Aroclor-1242	70	U
12672-29-6	Aroclor-1248	70	U
11097-69-1	Aroclor-1254	70	U
11096-82-5	Aroclor-1260	70	U

0447

FORM 1
AROCLOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

K25727

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL395

Phase Type: SOIL

Lab Sample ID: 584019

Phase Weight: 10.00 (g)

Date Received: 08/30/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/30/04

Dilution Factor: 1.0

Date Analyzed: 09/09/04

% Solids: 40

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	120	U
11104-28-2	Aroclor-1221	120	U
11141-16-5	Aroclor-1232	120	U
53469-21-9	Aroclor-1242	120	U
12672-29-6	Aroclor-1248	120	U
11097-69-1	Aroclor-1254	120	U
11096-82-5	Aroclor-1260	69	J

0457

**FORM 1
AROCOR ANALYSIS DATA SHEET**

EPA SAMPLE NO.

K25728

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL395

Phase Type: SOIL

Lab Sample ID: 584020

Phase Weight: 10.05 (g)

Date Received: 08/30/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/30/04

Dilution Factor: 1.0

Date Analyzed: 09/10/04

% Solids: 44

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	110	U
11104-28-2	Aroclor-1221	110	U
11141-16-5	Aroclor-1232	110	U
53469-21-9	Aroclor-1242	110	U
12672-29-6	Aroclor-1248	110	U
11097-69-1	Aroclor-1254	280	
11096-82-5	Aroclor-1260	110	U

0468

FORM 1
AROCOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

K25729

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL395

Phase Type: SOIL

Lab Sample ID: 584021

Phase Weight: 10.04 (g)

Date Received: 08/30/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/30/04

Dilution Factor: 1.0

Date Analyzed: 09/10/04

% Solids: 87

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	57	U
11104-28-2	Aroclor-1221	57	U
11141-16-5	Aroclor-1232	57	U
53469-21-9	Aroclor-1242	57	U
12672-29-6	Aroclor-1248	57	U
11097-69-1	Aroclor-1254	57	U
11096-82-5	Aroclor-1260	57	U

0479

**FORM 1
AROCOR ANALYSIS DATA SHEET**

EPA SAMPLE NO.

K25730

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL395

Phase Type: SOIL

Lab Sample ID: 584022

Phase Weight: 9.98 (g)

Date Received: 08/30/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/30/04

Dilution Factor: 1.0

Date Analyzed: 09/10/04

% Solids: 25

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	200	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	200	U
53469-21-9	Aroclor-1242	200	U
12672-29-6	Aroclor-1248	200	U
11097-69-1	Aroclor-1254	340	
11096-82-5	Aroclor-1260	200	U

0489

**FORM 1
AROCOR ANALYSIS DATA SHEET**

EPA SAMPLE NO.

K25731

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL395

Phase Type: SOIL

Lab Sample ID: 584023

Phase Weight: 9.98 (g)

Date Received: 08/30/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/30/04

Dilution Factor: 1.0

Date Analyzed: 09/10/04

% Solids: 24

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	210	U
11104-28-2	Aroclor-1221	210	U
11141-16-5	Aroclor-1232	210	U
53469-21-9	Aroclor-1242	210	U
12672-29-6	Aroclor-1248	210	U
11097-69-1	Aroclor-1254	230	
11096-82-5	Aroclor-1260	210	U

0500

**FORM 1
AROCOR ANALYSIS DATA SHEET**

EPA SAMPLE NO.

K25732

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL395

Phase Type: SOIL

Lab Sample ID: 584024

Phase Weight: 9.98 (g)

Date Received: 08/30/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/30/04

Dilution Factor: 1.0

Date Analyzed: 09/10/04

% Solids: 87

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	58	U
11104-28-2	Aroclor-1221	58	U
11141-16-5	Aroclor-1232	58	U
53469-21-9	Aroclor-1242	58	U
12672-29-6	Aroclor-1248	58	U
11097-69-1	Aroclor-1254	58	U
11096-82-5	Aroclor-1260	58	U

0511

FORM 1
AROCLOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

K25733

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL395

Phase Type: SOIL

Lab Sample ID: 584025

Phase Weight: 9.99 (g)

Date Received: 08/30/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/30/04

Dilution Factor: 1.0

Date Analyzed: 09/10/04

% Solids: 85

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	59	U
11104-28-2	Aroclor-1221	59	U
11141-16-5	Aroclor-1232	59	U
53469-21-9	Aroclor-1242	59	U
12672-29-6	Aroclor-1248	59	U
11097-69-1	Aroclor-1254	37	J
11096-82-5	Aroclor-1260	59	U

0520

**FORM 1
AROCOR ANALYSIS DATA SHEET**

EPA SAMPLE NO.

K25734

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL395

Phase Type: SOIL

Lab Sample ID: 584026

Phase Weight: 10.05 (g)

Date Received: 08/30/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/30/04

Dilution Factor: 1.0

Date Analyzed: 09/10/04

% Solids: 56

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	89	U
11104-28-2	Aroclor-1221	89	U
11141-16-5	Aroclor-1232	89	U
53469-21-9	Aroclor-1242	48	J
12672-29-6	Aroclor-1248	140	
11097-69-1	Aroclor-1254	340	
11096-82-5	Aroclor-1260	89	U

0529

**FORM 1
AROCOR ANALYSIS DATA SHEET**

EP 1 SAMPLE NO.

K25735

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL395

Phase Type: SOIL

Lab Sample ID: 584 127

Phase Weight: 9.99 (g)

Date Received: 08/31/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/31/04

Dilution Factor: 1.0

Date Analyzed: 09/11/04

% Solids: 79

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	63	U
11104-28-2	Aroclor-1221	63	U
11141-16-5	Aroclor-1232	63	U
53469-21-9	Aroclor-1242	63	U
12672-29-6	Aroclor-1248	63	U
11097-69-1	Aroclor-1254	63	U
11096-82-5	Aroclor-1260	63	U

0540

**FORM 1
AROCOR ANALYSIS DATA SHEET**

EF A SAMPLE NO.

K25736

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG KAL395

Phase Type: SOIL

Lab Sample ID: 58-028

Phase Weight: 9.95 (g)

Date Received: 08/0/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/0/04

Dilution Factor: 1.0

Date Analyzed: 09/0/04

% Solids: 71

Sulfur Clean-up: I (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	7	U
11104-28-2	Aroclor-1221	7	U
11141-16-5	Aroclor-1232	7	U
53469-21-9	Aroclor-1242	7	U
12672-29-6	Aroclor-1248	3	J
11097-69-1	Aroclor-1254	7	U
11096-82-5	Aroclor-1260	7	U

0550

FORM 1
AROCLOR ANALYSIS DATA SHEET

EF A SAMPLE NO.

K25737

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG KAL395

Phase Type: SOIL

Lab Sample ID: 584 029

Phase Weight: 10.05 (g)

Date Received: 08/11/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/11/04

Dilution Factor: 1.0

Date Analyzed: 09/11/04

% Solids: 78

Sulfur Clean-up: I (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	64	U
11104-28-2	Aroclor-1221	64	U
11141-16-5	Aroclor-1232	64	U
53469-21-9	Aroclor-1242	64	U
12672-29-6	Aroclor-1248	64	U
11097-69-1	Aroclor-1254	64	U
11096-82-5	Aroclor-1260	64	U

0561

**FORM 1
AROCOR ANALYSIS DATA SHEET**

EPA SAMPLE NO.

K25739

Lab Name: STL Burlington

Lab Code: STLVT

Contract: 24000

Case: 24000

SDG: KAL395

Phase Type: SOIL

Lab Sample ID: 584030

Phase Weight: 10.05 (g)

Date Received: 08/30/04

Injection Volume: 1.0 (uL)

Date Extracted: 08/30/04

Dilution Factor: 1.0

Date Analyzed: 09/10/04

% Solids: 49

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/Kg	QUALIFIER
12674-11-2	Aroclor-1016	100	U
11104-28-2	Aroclor-1221	100	U
11141-16-5	Aroclor-1232	100	U
53469-21-9	Aroclor-1242	130	
12672-29-6	Aroclor-1248	100	U
11097-69-1	Aroclor-1254	370	
11096-82-5	Aroclor-1260	100	U

0570

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25719

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL395

Lab Code: STLV

Case No.: 24000

Lab Sample ID: 584011

Matrix: SOIL

Client: BLABO2

Date Received: 08/30/04

% Solids: 87.7

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		87.7	
IN847	TOC by Lloyd Kahn	08/31/04	BLKLK0831A	mg/Kg	1	570	13500	

0006

Printed on: 09/13/04 02:22 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25720

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL395

Lab Code: STLVT

Case No.: 24000

Lab Sample ID: 584012

Matrix: SOIL

Client: BLABO2

Date Received: 08/30/04

% Solids: 52.3

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		52.3	
IN847	TOC by Lloyd Kahn	08/31/04	BLK0831A	mg/Kg	1	956	103200	

0007

Printed on: 09/13/04 02:22 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25721

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL395

Lab Code: STLVT

Case No.: 24000

Lab Sample ID: 584013

Matrix: SOIL

Client: BLABO2

Date Received: 08/30/04

% Solids: 56.0

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		56.0	
IN847	TOC by Lloyd Kahn	08/30/04	BLKLG0830A	mg/Kg	1	893	39500	

0008

Printed on: 09/13/04 02:22 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25722

Name: STL BURLINGTON

Contract:

SDG No.: KAL395

Code: STLVT

Case No.: 24000

Lab Sample ID: 584014

Matrix: SOIL

Client: BLABO2

Date Received: 08/30/04

% Solids: 82.5

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		82.5	
IN847	TOC by Lloyd Kahn	08/31/04	BLKLK0831A	mg/Kg	1	606	5780	

0009

Printed on: 09/13/04 02:22 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25723

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL395

Lab Code: STLVT

Case No.: 24000

Lab Sample ID: 584015

Matrix: SOIL

Client: BLABO2

Date Received: 08/30/04

% Solids: 81.8

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		81.8	
IN847	TOC by Lloyd Kahn	08/31/04	BLK0831B	mg/Kg	1	611	36200	

0010

Printed on: 09/13/04 02:22 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25724

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL395

Code: STLV

Case No.: 24000

Lab Sample ID: 584016

Matrix: SOIL

Client: BLABO2

Date Received: 08/30/04

% Solids: 82.8

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		82.8	
IN847	TOC by Lloyd Kahn	08/31/04	BLKLG0831B	mg/Kg	1	604	7940	

0011

Printed on: 09/13/04 02:22 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25725

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL395

Lab Code: STLVT

Case No.: 24000

Lab Sample ID: 584017

Matrix: SOIL

Client: BLABO2

Date Received: 08/30/04

Solids: 37.1

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		37.1	
IN847	TOC by Lloyd Kahn	08/31/04	BLKCLK0831B	mg/Kg	1	1350	96000	

0012

Matr

K25726

SDG No.: KAL395

Lab Sample ID: 584018

Date Received: 08/30/04

2018年

[illegible]

●●●●●

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25727

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL395

Lab Code: STLVT

Case No.: 24000

Lab Sample ID: 584019

Matrix: SOIL

Client: BLABO2

Date Received: 08/30/04

% Solids: 40.4

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		40.4	
IN847	TOC by Lloyd Kahn	08/31/04	BLKCLK0831B	mg/Kg	1	1240	85900	

0014

Printed on: 09/13/04 02:22 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25728

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL395

Lab Code: STLVT

Case No.: 24000

Lab Sample ID: 584020

Matrix: SOIL

Client: LABO2

Date Received: 08/30/04

Solids: 43.7

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		43.7	
IN847	TOC by Lloyd Kahn	08/31/04	BLKLK0831B	mg/Kg	1	1140	93200	

0015

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25729

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL395

Lab Code: STLVT

Case No.: 24000

Lab Sample ID: 584021

Matrix: SOIL

Client: BLABO2

Date Received: 08/30/04

Solids: 87.3

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		87.3	
IN847	TOC by Lloyd Kahn	08/31/04	BLK0831B	mg/Kg	1	573	1460	

0016

Printed on: 09/13/04 02:22 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25730

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL395

Lab Code: STLVT

Case No.: 24000

Lab Sample ID: 584022

Matrix: SOIL

Client: BLABO2

Date Received: 08/30/04

% Solids: 24.6

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		24.6	
IN847	TOC by Lloyd Kahn	08/31/04	BLKLK0831B	mg/Kg	1	2030	207900	

0017

Printed on: 09/13/04 02:22 PM

100

K25731

●●

●●

●●

1. a

1. a

1. a

and 10.

and 10.

and 10.

2

400

44

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25732

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL395

Lab Code: STLVT

Case No.: 24000

Lab Sample ID: 584024

Matrix: SOIL

Client: BLABO2

Date Received: 08/30/04

% Solids: 86.8

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		86.8	
IN847	TOC by Lloyd Kahn	08/31/04	BLK0831B	mg/Kg	1	576	5350	

0019

Printed on: 09/13/04 02:22 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25733

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL395

Lab Code: STLVT

Case No.: 24000

Lab Sample ID: 584025

Matrix: SOIL

Client: BLABO2

Date Received: 08/30/04

Solids: 84.8

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		84.8	
IN847	TOC by Lloyd Kahn	08/31/04	BLKLK0831B	mg/Kg	1	590	18200	

0020

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25734

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL395

Lab Code: STLVT

Case No.: 24000

Lab Sample ID: 584026

Matrix: SOIL

Client: BLABO2

Date Received: 08/30/04

% Solids: 56.0

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		56.0	
IN847	TOC by Lloyd Kahn	08/30/04	BLK0830A	mg/Kg	1	893	126800	

0021

Printed on: 09/13/04 02:22 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25735

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL395

Lab Code: STLVT

Case No.: 24000

Lab Sample ID: 584027

Matrix: SOIL

Client: BLABO2

Date Received: 08/30/04

Solids: 78.7

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		78.7	
IN847	TOC by Lloyd Kahn	08/30/04	BLKLK0830A	mg/Kg	1	635	32900	

0022

Printed on: 09/13/04 02:22 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25736

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL395

Lab Code: STLVT

Case No.: 24000

Lab Sample ID: 584028

Matrix: SOIL

Client: BLABO2

Date Received: 08/30/04

% Solids: 71.0

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		71.0	
IN847	TOC by Lloyd Kahn	08/31/04	BLKLG0831A	mg/Kg	1	704	36700	

0023

Printed on: 09/13/04 02:22 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

K25737

Lab Name: STL BURLINGTON

Contract:

SDG No.: KAL395

Lab Code: STLVT

Case No.: 24000

Lab Sample ID: 584029

Matrix: SOIL

Client: BLABO2

Date Received: 08/30/04

Solids: 78.0

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		78.0	
IN847	TOC by Lloyd Kahn	08/31/04	BLKLK0831B	mg/Kg	1	641	17400	

0024

Printed on: 09/13/04 02:22 PM

Sample Report Summary

Client Sample No.

K25739

1. Name: STL BURLINGTON

Contract:

SDG No.: KAL395

L-4 Code: STLVT

Case No.: 24000

Lab Sample ID: 584030

Matrix: SOIL

Client: BLAB02

Date Received: 08/30/04

% Solids: 49.5

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	08/31/04	N/A	%	1.0		49.5	
IN847	TOC by Lloyd Kahn	08/31/04	BLKLG0831A	mg/Kg	1	1010	93000	

0025

ri ed on: 09/13/04 02:22 PM